A PHENOMENOGRAPHICAL STUDY OF THE QUALITATIVE VARIATION OF ADVENTURE / WILDERNESS PROGRAMME EXPERIENCES AMONG ADOLESCENT HIGH SCHOOL PARTICIPANTS IN THE WESTERN CAPE

CONRAD STANISŁAW ZYGMONT

Dissertation presented for the degree of Doctor of Philosophy in the Faculty of Arts and Social Sciences, at Stellenbosch University

Supervisor: Professor Anthony V. Naidoo

April 2014
DECLARATION

By submitting this dissertation electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the sole author thereof (save to the extent explicitly otherwise stated), that the reproduction and publication thereof by Stellenbosch University will not infringe any third party rights and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

March 2014
South African adolescents live in a transitional society during a life stage in which they seek to stabilise their identity. They face a heritage of widespread violence and poverty, the lived impact of HIV/AIDS and substance abuse, incessant bombardment by media modelling leisure and vice, an erratic education system, and strained family and social bonds. Noting these challenges South African psychology seeks to become more socially relevant and provide formalised opportunities for positive youth development, supporting the growth of strengths and virtues, and making high human potential actual. Psychologists should seek to provide interventions that can turn the tide of social degeneration towards individual and community flourishing. Schools provide an optimal context for such interventions, with adventure programmes providing a valuable mechanisms by which holistic development, flow, interdependence, competence, and modelling of pro-social values can be experienced.

This study sought to investigate the different ways in which one such school-based wilderness adventure programme was experienced and the specific aspects of the programme responsible for variation in outcomes using the methodology of phenomenography. Phenomenography is a research method used to map the qualitatively different ways in which people understand, perceive, or experience various aspects of a specific phenomenon. By understanding the different ways a phenomenon can be experienced, and identifying the critical aspects responsible for more or less powerful ways of experiencing the phenomenon, phenomenography provides a powerful tool for improving educational delivery but had yet to be used as a method to study psychological interventions. Phenomenographic analysis of the descriptions of the 27 day adventure programme, in which participants covered 360km on foot, bicycle and canoe, and engaged in group debriefs, journalling, and a 30 hour solo, revealed four conceptions of the programme: (a) long gruelling school hike, (b) school initiation / rites of passage
programme, (c) once-in-a-lifetime group adventure, or (d) multifaceted learning and development opportunity. These categories of description are structured hierarchically, from least to most powerful, and are directly related to the perceived outcomes of the programme. At the lowest level, perceived processes and outcomes are largely physical, whereas at the highest level participants descriptions are more complex, and focused more on learning and developmental change that was accrued during the programme and could be transferred to the participant's home and social context.

There are six major dimensions of variations that were identified in the data that help to understand the hierarchical relationships between the four identified categories of description. These include (a) the overall characterisation of the programme, (b) the nature of group interactions and processes, (c) the nature of the interactions and emotional connection participants had with their adult leaders, (d) the depth with which participants engaged with their experiences on the programme, (e) the personal relevance that trials, interactions and accomplishments had for participants, and (f) the type of growth and learning that was perceived to have accrued as a result of the wilderness adventure programme. These findings have important implications for both adventure programming design and implementation, and for research on psychological interventions.

**Key words:**

Wilderness experience programme, adventure programming, adventurous experiential learning, phenomenography, phenomenographic analysis, positive youth development
Suid-Afrikaanse adolessente leef in ‘n oorgang samelewing gedurende ‘n lewensstadium waarin hulle poog om hul identiteit te stabiliseer. Hulle staar ‘n erfenis van wydverspreide geweld en armoede in die gesig, die geleefde impak van MIV/VIGS en dwelmverslawing, die aanhoudende bombardement deur die media wat ontspanning en onsedelikheid modelleer, ‘n wisselvallige onderwyssisteem, en gespanne gesins- en sosiale verbintenisse. Suid-Afrikaanse sielkunde het kennis geneem van hierdie uitdagings en poog om meer sosiaal relevant te word, en om geformaliseerde geleentheid te verskaf vir positiewe jeugontwikkeling wat die ontwikkeling van sterktes en deugde ondersteun, sowel as om hoë menslike potensiaal te aktualiseer. Sielkundiges behoort te streef om intervensies te verskaf wat sosiale agteruitgang kan verander in individuele- en gemeenskapsflorering. Skole verskaf ‘n optimale konteks vir so ‘n intervensie, met avontuur programme wat ‘n waardevolle mekanisme verskaf deur middel waardeur holistiese ontwikkeling, vloei, interafhanklikheid, bevoegdheid, en die modellering van pro-sosiale waardes ondervind kan word.

Hierdie studie het gepoog om die verskillende maniere te ondersoek van hoe so ‘n skoolgebaseerde wildernis avontuur program ondervind was, asook die spesifieke aspekte van die program wat verantwoordelik was vir die variasie in uitkomste deur middel van die gebruik van fenomenografiese metodologie. Fenomenografie is ‘n navorsingsmetode wat gebruik word om kwalitatief verschillende maniere te karteer van hoe mense verskillende aspekte van ‘n spesifieke fenomeen begryp, waarneem, of ondervind. Deur die verschillende maniere te verstaan van hoe ‘n fenomeen ondervind kan word, en deur die kritiese aspekte te identifiseer wat verantwoordelik is vir die ūf meer ūf minder krachtige maniere van hoe die fenomeen ondervind kan word, verskaf fenomenografie ‘n krachtige instrument wat aangewend kan word vir verbeterde onderwyslewing alhoewel die metode tot dusver nie aangewend is om sielkundige intervensionies te bestudeer nie.
Fenomenografiese analyse van die beskrywings van ‘n 27-dag avontuur program, waarin deelnemers 360 km te voet, per fiets en kanoe gedek het, en deelgeneem het aan groepontlontings, dagboekhou, en ‘n 30-uur solo, het vier opvattings van die program onthul: (a) ‘n lang, uitmergelende skool staproete, (b) ‘n skool inwyding- / passasierite program, (c) ‘n eenmalige groep avontuur, of (d) ‘n veelsydige leer- en ontwikkelingsgeleentheid. Hierdie beskrywingskategorieë is hierargies gestruktureerd, van die mins tot die mees krachtig, en is direk verwant aan die waargenome uitkomste van die program. Op die laagste vlak is waargenome prosesse en uitkomste grootliks fisies, teenoor die hoogste vlak waar die beskrywings van deelnemers meer kompleks is, en meer gefokus is op leer- en ontwikkelingsverandering wat oplooptydens die program, en oorgedra kan word tot die deelnemer se huis- en sosiale konteks. Daar is ses hoof variasie dimensies wat geïdentifiseer is in die data wat lei tot ‘n beter begrip van die hierargiese verhoudings tussen die vier geïdentifiseerde beskrywingskategorieë. Hierdie sluit in (a) die algehele karakterisering van die program, (b) die aard van die groep interaksies en prosesse, (c) die aard van die interaksies en emosionele verband wat deelnemers gehad het met hulle volwasse leiers, (d) die diepte waarmee deelnemers geskakel het met hul ondervindings van die program, (e) die persoonlike relevansie wat beproewings, interaksies en prestasies gehad het vir die deelnemers, en (f) die tipe groei en leer wat ervaar is en vermeerder het as gevolg van die wildernis avontuur program. Hierdie bevindinge het belangrike implikasies vir beide die ontwerp van avontuur programmering, die implementering daarvan, en vir navorsing op sielkundige intervensies.

**Trefwoorde:**

Wildernis ondervinding program, avontuur programmering, avontuurlustige ervaringsleer, fenomenografie, fenomenografiese analise, positiewe jeugontwikkeling
The phrase “standing on the shoulders of giants” is a common cliché in academia, my experience is more of being carried on the shoulders of giants. I would like to express my sincere thanks to a number of individuals and organisations whose contribution made this work possible:

• First and foremost I acknowledge God, for without God I would not achieve anything and could not have made use of any opportunities or developed any of the abilities that were given to me.

• Prof. Tony Naidoo, thank you for you sharing your insights and experience. I am especially grateful for your patience and for giving me the space to work within my own time constraints.

• Thank you Jesica, Emily and Arianna for giving up a significant part of our lives so that I could work, and taking up so much responsibility that would normally have been mine. Your efforts and continued support through difficult times is deeply appreciated.

• Gracias Vicky y Agustín por sacrificar meses de sus días y noches para ayudarnos. Sin duda, nunca habría terminado esta tesis sin su ayuda.

• I thank my mom and late grandmother for their continued love and support of my endeavours.

• I am indebted to Prof. Brandon Collier-Reed, for your willingness to discuss my phenomenographic journey, and for your guidance regarding my process.

• I would like to express my thanks to Ference Marton, Alan Barnard, Arnold Pears, Diane Brewster, Mike Watkins, Patrick Branson, and Noel Entwistle for your willingness to engage with me regarding my ideas for phenomenography.

• I would like to thank Quinten, Alwyn, and Dave Campbell for making this research possible

• Thank you to all the participants who shared their experiences and stories so willingly

• I would like to acknowledge the financial assistance provided by the Southern Africa-Indian Ocean Division of Seventh-day Adventists and Helderberg College.

• Preliminary results from this study were presented at 17th annual PsySSA conference.
DEDICATION

This work is dedicated to the following individuals whom I cherish with the whole of my heart:

Babcia, Mama, i Asia

Twoja nieustajaca milosc jest zarodkiem mojego sukcesu
Obecna lub oddalona, daleko czy blisko
Jestes szanowana, ceniona i wplywowa
Od mojego pierwszego oddechu, do ostatniej mysli
Ty ciagle kształtujesz kim jestem
Dziekuje

Jesica, Emily y Arianna

We are one flesh, we feel the same, our hearts beat together
You stood by me when times were rough
My choices you lived every day
How can I say thank you enough?
I'll look after our hearts our love our home
And seek to reciprocate your sacrificial love
Thank you.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Declaration</td>
<td>ii</td>
</tr>
<tr>
<td>Abstract</td>
<td>iii</td>
</tr>
<tr>
<td>Opsomming</td>
<td>v</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>vii</td>
</tr>
<tr>
<td>Dedication</td>
<td>viii</td>
</tr>
<tr>
<td>List of Terms and Abbreviations</td>
<td>xiv</td>
</tr>
<tr>
<td>List of Tables</td>
<td>xvi</td>
</tr>
<tr>
<td>List of Figures</td>
<td>xvii</td>
</tr>
<tr>
<td>List of Appendices</td>
<td>xviii</td>
</tr>
<tr>
<td><strong>Chapter 1: Introduction and Motivation</strong></td>
<td>1</td>
</tr>
<tr>
<td>1.1 Background to the Study</td>
<td>1</td>
</tr>
<tr>
<td>1.2 Adventure Programming: Uses and Value</td>
<td>3</td>
</tr>
<tr>
<td>1.3 Research on Adventure Programming</td>
<td>4</td>
</tr>
<tr>
<td>1.4 Motivation for the Present Study</td>
<td>6</td>
</tr>
<tr>
<td>1.5 Problem Statement</td>
<td>7</td>
</tr>
<tr>
<td>1.6 Objectives of the Study</td>
<td>8</td>
</tr>
<tr>
<td>1.7 Organisation of the Dissertation</td>
<td>9</td>
</tr>
<tr>
<td><strong>Chapter 2: A Review of Adventure Programming Literature</strong></td>
<td>11</td>
</tr>
<tr>
<td>2.1 Introduction</td>
<td>11</td>
</tr>
<tr>
<td>2.2 Types and Characteristics of Adventure Programming</td>
<td>12</td>
</tr>
<tr>
<td>2.2.1 Types of Adventure programming</td>
<td>12</td>
</tr>
<tr>
<td>2.2.2 Characteristics of Adventure Programming</td>
<td>16</td>
</tr>
</tbody>
</table>
2.3. A Short Biography of Adventure Programming

2.3.1. The Origins of Adventure Programming

2.3.2. The History of Adventure Programming in South Africa

2.3.3. Moving South African Adventure Programming into the Future

2.4. Adventure Programming Models and Theoretical Frameworks

2.4.1. Experiential Learning Models

2.4.2. Wilderness Adventure Processing Models

2.4.3. Group Stage and Adaptation Models

2.4.4. Clinical and Psychotherapeutic Models

2.4.5. Concurrent Models

2.5. Mechanisms of Change

2.5.1. The Therapeutic Power of Wilderness

2.5.2. Intrinsically Motivating Adventure Activities

2.5.3. Processing and Reflection

2.5.4. Perceived Risk

2.5.5. Therapeutic Alliance in Adventure Programming

2.5.6. Supportive Group Context

2.6. Goals and Outcomes of Adventure Programmes

2.6.1. Improvements in Physical Health and Body Image

2.6.2. Self-Concept and Character Development

2.6.3. Psychosocial Learning and Strengthened Relationships

2.6.4. Spiritual and Religious Development

2.6.5. Improvement in Clinical Concerns

2.6.6. Meta-Analyses of Adventure Programming Research

2.7. Summary of the Literature Review
Chapter 3: Theoretical Framework

3.1. Introduction 95

3.2. Development and Change among Adolescents 95
   3.2.1. Adolescence as a Period of Developmental Change 96
   3.2.2. Traditional Approaches to Psychological Change among Adolescents 97
   3.2.3. The Positive Youth Development Approach 98
   3.2.4. Adventure Programming as an Alternative 99

3.3. Phenomenography as a Methodology for Understanding Learning 100
   3.3.1. The Ontological and Epistemological Stance of Phenomenography 103
   3.3.2. Developments in the use of Phenomenography 108

3.4. Qualitative Discovery of Mechanisms of Change 112

3.5. Summary 112

Chapter 4: Qualitative Methodological Paradigm 114

4.1. Introduction 114

4.2. Qualitative Design used in the Study: Phenomenography 117
   4.2.1. Origins and Development of Phenomenography 118
   4.2.2. Goals and aims of phenomenography 122
   4.2.3. The Unit of Analysis in Phenomenography 125
   4.2.4. Differentiating Phenomenography and Phenomenology 128
   4.2.5. Differentiating Phenomenography from Grounded Theory 131
   4.2.6. Critiques and debates within Phenomenography 133
   4.2.7. Relevance to the Present Study 139

4.3. Sampling Procedure and Participant Characteristics 140

4.4. Data Generation 144
   4.4.1. Important Qualities for Phenomenographical Interviews 144
4.4.2. Description of the Semi-Structured Interviews used for Data Generation 148

4.5. Data Analysis Process 151

4.5.1. General Principles of Phenomenographic Analysis 153

4.5.2. Variations in the Process of Phenomenographic Analysis 157

4.5.3. The Use of Computer Software in Phenomenographic Data Analysis 161

4.5.4. The Analysis Procedure Followed In This Study 164

4.6. Evaluation of the Quality or Rigour of the Research 167

4.6.1. Credibility 169

4.6.2. Dependability 170

4.6.3. Reflexivity 173

4.6.4. Transferability 177

4.7. Ethics 178

Chapter 5: Research Findings 183

5.1. Introduction 183

5.2. Different Ways the Adventure Programme can be Experienced 186

5.2.1. Long Gruelling School Hike 187

5.2.2. School Initiation / Rites of Passage 195

5.2.3. Once-in-a-lifetime Group Adventure Programme 209

5.2.4. Multifaceted Learning and Development Opportunity 223

5.3. Dimensions of Variation 236

5.3.1. Characterisation 238

5.3.2. Group Process 240

5.3.3. Outdoor Leader Alliance 242

5.3.4. Depth of Engagement 244

5.3.5. Personal Relevance 246
5.3.6. Perceived Outcomes 247

Chapter 6: Conclusions and Implications 250

6.1. Introduction 250

6.2. Summary of Findings 250

6.3. Conclusions 253

6.4. Limitations of the Study 255

6.5. Implications for Adventure Programming 256

6.6. Implications for Research 257

References 259
# LIST OF TERMS AND ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEE</td>
<td>Association for Experiential Education</td>
</tr>
<tr>
<td>AEL</td>
<td>Adventurous experiential learning</td>
</tr>
<tr>
<td>ARA</td>
<td>Adventure Recreation Association</td>
</tr>
<tr>
<td>CASEL</td>
<td>Collaborative for Academic Social and Emotional Learning</td>
</tr>
<tr>
<td>Categories of description</td>
<td>The qualitatively different ways a phenomenon may appear at the collective level identified using phenomenographic analysis</td>
</tr>
<tr>
<td>CBT</td>
<td>Cognitive behavioural treatment</td>
</tr>
<tr>
<td>Conception</td>
<td>The understanding an actor forms of an experience in their lifeworld, conceptualised as a relation between the object of the study and research subject</td>
</tr>
<tr>
<td>External horizon</td>
<td>Aspects of the world that form part of consciousness, but not active or focal awareness, which may influence the perception of a phenomenon</td>
</tr>
<tr>
<td>Internal horizon</td>
<td>Critical features of a phenomenon, and their relationships to each other and the whole</td>
</tr>
<tr>
<td>IPA</td>
<td>Interpretive phenomenological analysis</td>
</tr>
<tr>
<td>JBCI</td>
<td>Juvenile Boot Camp Institutions</td>
</tr>
<tr>
<td>NATSAP</td>
<td>National Association of Therapeutic Schools and Programmes</td>
</tr>
<tr>
<td>NATWC</td>
<td>National Association of Therapeutic Wilderness Camps</td>
</tr>
<tr>
<td>NOLS</td>
<td>National Outdoor Leadership School</td>
</tr>
<tr>
<td>OBH</td>
<td>Outdoor behavioural healthcare</td>
</tr>
<tr>
<td>OBHIC</td>
<td>Outdoor Behavioural Healthcare Industry Council</td>
</tr>
<tr>
<td>OBHRC</td>
<td>Outdoor Behavioural Healthcare Research Cooperative</td>
</tr>
<tr>
<td>OBP</td>
<td>Outward Bound Plus model of facilitation and processing</td>
</tr>
<tr>
<td>OCA</td>
<td>Outdoor Council of Australia</td>
</tr>
<tr>
<td>Outcome space</td>
<td>A diagrammatic or structural representation of the similarities and differences between the categories of descriptions resulting from phenomenographic analysis</td>
</tr>
<tr>
<td>PYD</td>
<td>Positive youth development</td>
</tr>
<tr>
<td>Referential aspect</td>
<td>The global or overall meaning ascribed to a phenomenon, what it is understood as being</td>
</tr>
<tr>
<td>Structural aspect</td>
<td>The combination of features discerned and focused upon by the subject, and their relationships to one another in making up a conception</td>
</tr>
<tr>
<td>TBI</td>
<td>Team Building Institute</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Thematised</td>
<td>When an aspect of the phenomenon is focal in awareness, it is consciously focused upon when a person thinks about or experiences a phenomenon</td>
</tr>
<tr>
<td>Thematic field</td>
<td>All of the aspects of the world that have semantic, affective, or experiential links to the theme, but are not necessarily in conscious awareness</td>
</tr>
<tr>
<td>Theme</td>
<td>The object of focal awareness, that aspect of a phenomenon upon which an individual is focused on.</td>
</tr>
<tr>
<td>THETA</td>
<td>Tourism and Hospitality Education and Training Authority</td>
</tr>
<tr>
<td>Variation theory</td>
<td>It is through experiencing variation in critical features of a phenomenon that we are able to discern more critical aspects of that phenomenon that leads to learning or change</td>
</tr>
<tr>
<td>WEP</td>
<td>Wilderness experiential programme</td>
</tr>
</tbody>
</table>
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>McPhee and Gass' (1993) adventure programme group development model</td>
<td>44</td>
</tr>
<tr>
<td>2.2</td>
<td>Hoyer's (2004) concurrent progression model</td>
<td>53</td>
</tr>
<tr>
<td>2.3</td>
<td>Bowen and Neill's (2013) meta-analysis of adventure programming outcomes</td>
<td>90</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

PAGE:

Figure 2.1: A typology of adventure programmes 16
Figure 2.2: Learning combination lock 36
Figure 2.3: Conditional Outdoor Leadership Theory 45
Figure 3.1: Relationality of entities in a phenomenographic epistemology 107
Figure 5.1: Utterances, categories of description, and dimensions of variation 185
Figure 5.2: Graphic representation of the outcome space 186
LIST OF APPENDICES

Appendix 1: Examples of interventions using adventure or wilderness in the Western Cape
Appendix 2: Comparison between analysis steps taken by seven different phenomenographers
Appendix 3: Initial plot of categories of description
Appendix 4: Interview schedule
Appendix 5: Symbols used in the transcripts
CHAPTER 1:
INTRODUCTION AND MOTIVATION

1.1. Background to the Study

Within the last decade there has been a renewed interest in making psychology more socially relevant; addressing the socio-cultural-political needs of the communities it serves, advancing social justice within training programmes, focusing on prevention, and ensuring interventions are relevant and accessible to diverse groups (Ali, Liu, Mahmood, & Arguello, 2008; Duncan, Bowman, Naidoo, Pillay, & Roos, 2007). Psychologists are grappling with the question: “What constitutes health-promoting clinical practice aimed at fostering full-spectrum individual and community prosperity in a global age?” (Mustakova-Possardt, Lyubansky, Basseches, & Oxenberg, 2014, p. 66). In South Africa psychologists operate within communities that have a heritage of poverty, unemployment, educational deprivation, and social degeneration. To remedy the historical trajectory of society, its future bearers – adolescents – must be provided with formalised opportunities to attain optimal cognitive, moral, emotional, and physical development, not merely to pull back those youth who are standing on the brink, all but lost, but as a matter of course (Ferguson, 1999; Richter, Panday, Swart, & Norris, 2009). Adolescence is a critical and tumultuous life stage, requiring the successful ascendency of several developmental milestones (Holmbeck, Greenley, & Franks, 2003). Successful navigation is not solely dependant upon the choices of the individual, but is strongly influenced by the social context (Vygotsky, 1978). If adolescents are exposed to numerous risk factors in their environment, but given few opportunities to develop fortogenic resources, large numbers of youth may find themselves trapped in a cycle of destruction\(^1\). Once caught into this downwards spiral they are prey to substance abuse, rejection, crime and violence, of which they become both the main victims and perpetrators (Leoschut & Burton, 2006;  

\(^1\) The phrase “cycle of destruction” is borrowed from Linzi Thomas of the MyLife Foundation, who uses this phrase often in her communications and publications.
Morrow, Panday, & Richter, 2005; Saloojee & Pettifor, 2005). Many social commentators have noted that the very structures required by youth for healthy development – health, family, school and community – are being compromised in South Africa; leaving the youth, although a demographic majority, marginalised as an outcast minority (Burton, 2008; Dawes et al., 1997; Dissel, 1997; George, 2001; Harker et al., 2008; Lockhat & Van Niekerk, 2000; Pelser, 2008; Sommers, 2003). In brief, “parents are too stressed, schools are too impersonal, and the community is too disorganised to fulfil the most basic human need of children to belong” (Bendtro, Brokenleg, & Van Bockern, 2001, p. 7). These challenges are not localised, but are endemic to modern western society, which has replaced meaningful social roles by which adolescents learnt responsibility and citizenship, with entertainment, leisure and vice (Ornstein, 1981). Modern youth find themselves living in a society which is “information-rich but experience-poor, where family unit-bonds are attenuated and stressed, where schooling further isolates children from meaningful challenges and direct participation in society, and where the media often model destructive, anti-social values” (Kimball & Bacon, 1993, p. 19). It is clear that the situation of adolescents should be placed amongst the top priorities of post-apartheid South Africa, and that nurturing the structures necessary for their optimal development be seen as an immediate goal. To be socially responsive and accountable, psychologists must add their knowledge and expertise to finding solutions to contextual risk-factors, as well as developing interventions that empower youth with the fortitude and psychological skills needed to thrive in modern societies.
1.2. Adventure Programming: Uses and Value

Youth development programmes initiated by the South African Government are sparse and have largely operated on an *ad hoc* basis (Horn, 2001); however, various non-governmental organisations, schools and individuals have stepped in to pursue the challenge of providing youth training, development, prevention, rehabilitation, and therapeutic programmes. One mode of delivering such services is through adventure programming. Adventure programming is the purposeful use of adventure activities and/or wilderness for the purpose of cognitive (e.g. information acquisition), physical (e.g. technical skill development), and/or affective (e.g. emotional and social development) change (Glass & Myers, 2001). Adventure programmes making extensive use of wilderness are often referred to as Wilderness Experiential Programmes (WEPs), whereas those placing emphasis on adventure activities in novel contexts, such as ropes courses, are referred to as Adventurous Experiential Learning (AEL) programmes (Dawson, Friese, Tangen-Foster, & Carpenter, 1998; Heunis, 1997). Adventure programming has been applied to a range of purposes including recreation, education, development, and therapy (Priest & Gass, 2005). The programme curriculum typically consists of a series of activities, chosen so that they are incrementally sequenced in difficulty, and designed so that they are mastered only as groups persevere, exercise creativity, and develop a sense of interdependence (Kimball & Bacon, 1993). The use of adventure programming in providing developmental and resilience-based support, as well as for therapeutic intervention, is especially popular in the United States, Australia, and the United Kingdom (Priest, 1999). Studies on the effectiveness of South African AEL and WEPs
suggest they are valuable as primary, adjunctive, or diversion growth-enhancing interventions for adolescents (Greffrath, 2009; Louw, 2008; Steyn, 2010; Tesnear, 2004; Verster, 2004). These programmes were introduced in South Africa in the early 1900's, and despite limited publicity, are proving increasingly popular among organisations interested in corporate development, therapeutic intervention, and as diversion options for at-risk youth (Heunis & Priest, 2008; Steyn, 2005). There are a number of reasons for the wide acceptance of such programmes including empirical support for their efficacy especially among adolescents; applicability to a range of purposes and populations; versatility for use in prevention, treatment and rehabilitation; the belief that such programmes are better suited to adolescent's unique developmental, character and therapeutic needs than traditional and autocratic interventions; and because they provide a welcome middle ground between inpatient programmes that tend to be expensive and overly restrictive, and outpatient programmes to which adolescents are unlikely to commit (Bandoroff & Newes, 2004; Bruyere, 2002; Neill, 2003; Priest & Gass, 2005; Russell, Hendee, & Phillips-Miller, 2000).

1.3. Research on Adventure Programming

Within the broad spectrum of youth development programmes that have been developed and are in use in South Africa, the majority remain unevaluated and lack a solid theoretical foundation (Leggett, 2005). While some academic studies have been conducted into the effectiveness of adventure programmes running in South Africa, there remains a need for research into their outcomes, processes and long-term
effectiveness. This is spurned on by a drive for empirically based treatments, allowing for clients, funders and insurance companies to challenge and examine the worth of specific programmes for a given population, in achieving specified goals, over a stipulated period of time, and under specific conditions (Kagee, 2006; Kazdin, 1997). In the United States, where over 75% of Outdoor Behavioural Healthcare (OBH) initiatives had not performed internal evaluations of their programmes (Russell & Hendee, 2000), concerns regarding validation and legitimacy lead to an extensive rage of outcome studies (Russell, 2003b, 2004). Similarly, Australia has also produced a fair amount of outcomes, process evaluation research, and meta-analyses (Bowen & Neill, 2013).

A review of the adventure programming literature reveals that most of the published papers are theoretical literature reviews, with some qualitative descriptions of clients perceptions of outcomes and valuable processes, and a number of quasi-experimental outcome studies (Russell, 2006b). Neill (2003) suggests that there is a specific need to supplement empirical outcome studies with qualitative insight from clinical studies into the experiences and meanings valuable to participants of adventure programming. Similarly, Russell (2006b) stresses the need for quantitative studies to demonstrate outcomes and secure funding, but points out that qualitative methodology is more appropriate to many of the questions posed in experiential education. Within the South African context, Botha (2007) has also recommended that further research into the voices of programme participants be conducted.
1.4. Motivation for the Present Study

Adventure programming has been described as an integration of psychological theory and educational delivery (Hans, 2000). Seeing as it is used in multiple contexts, including education and therapy, Schoel and Maizell (2002) suggest that “it seems that one could easily substitute the term learning or change for healing” (p. 8). For any learning, healing, or development to take place consolidation of meaning from experience must take place – instructors must “help people integrate and make sense of their experiences in a healthy manner” (Schoel & Maizell, 2002, p. 11). Consequently, the effectiveness of any adventure programme is largely subsumed by how effectively clients internalise meaning from adventure experiences, metaphors of growth, rituals and natural consequences and apply these to real life – often a difficult task for adolescents (Pinnock & Douglas-Hamilton, 1998; Russell et al., 2000). Meanings derived from positive experiences may be internalised as mental representations of the self and one's relation to the world, in the form of a narrative (or life script), and are central to the development of self-regulation and identity that would contribute to positive youth development (Gestsdottir & Lerner, 2008). It is important to understand the different aspects of an adventure programme that facilitate such learning or development. Stated another way, it is important to understand the different ways, from pitiful to powerful, that adventure programmes could be experienced, and identify the critical components or processes that explain these differences in outcome. Marton and Booth (1997) propose phenomenography as a qualitative approach to research aimed at “describing the phenomena in the world as others see them, and in revealing and describing the variation therein, especially in an
educational context” (p. 111). The present study utilised this phenomenographic approach to analysis in order to describe the different ways in which a school wilderness adventure programme could be experienced, identify critical features of experience responsible for said variation, and use this knowledge to improve educational delivery of the adventure programme.

1.5. Problem Statement

Bandoroff and Newes (2004) suggest adventure therapy has matured since its “adolescence” in the 1990’s, when it was largely searching for an identity and its place in the world, to a stage where it is aware and willing to grapple with the key issues, making progress and yet comfortable with not having all the solutions. Much of the research conducted has purported to demonstrate the merits of adventure programming, and outline standards and best practice guidelines (Russell, 2004). However, there remains a paucity of research into the mechanisms of change and processes that explain impacts for specific populations - a need common to all interventions used with adolescents (Kazdin, 1997, 2003; Kazdin & Nock, 2003; Rosenfeld; 2009). Russell (2004) suggests that future research should “include a more thorough understanding of the process elements that explain the variance in outcomes previously reported” (p. 150). Neill (2003) suggested that researchers need to engage in "innovative, large-scale qualitative investigations which identify and seek to better understand clinically significant moments and processes which occur in adventure therapy programs” (p. 320). This study aims to address these needs by employing phenomenography, a methodology specifically formulated to study how cognitive
formulations of experience are formed and structured, in order to provide insight into the core mechanisms responsible for learning in adventure programming. This study serves two core purposes: (a) investigating the different ways in which a school-based wilderness adventure programme is experienced and the factors contributing to this variation, and (b) providing a demonstration of how phenomenography could be used to further research within the field.

1.6. Objectives of the Study

The adventure programme focused on in this study is a school-based, wilderness adventure programme in which the entire grade 9 cohort are split into single-gender groups of approximately 16 adolescents who are accompanied by two or three adults per group. During the wilderness continuous excursion, which lasts almost an entire month, participants engage in physical activities such as hiking, cycling and canoeing over 360km, social activities such as food groups, debriefs, and team-building activities, as well as personal enrichment activities such as prescribed readings, and a 30 hour solo. Using what Marton (1981) termed a second-order perspective, the researcher aims to identify, from the participant's own view, the different ways in which the adventure programme was perceived, and analyse which key aspects of the experience were responsible for the variation observed. Specifically, the aims of the proposed study include:

- To identify those salient experiences, events, or activities that participants felt impacted them most during their wilderness experiential programme. Components that have been identified in the literature include social
relationships (Berman & Davis-Berman, 1995); the experience of wilderness (Botha, 2007); as well as the actual activities used, such as solo, raft building, hiking, King's Ring and so forth (Glass & Myers, 2001). This study will use an inductive approach, allowing participants to highlight which experiences were most significant for them.

- To explore the variations in meaning ascribed to these shared, salient experiences, across the different participants interviewed. This involves forming a rich description of the qualitatively different ways in which participants may experience the identified key components of adventure programming, rather than studying the actual processes of the adventure programme themselves.

- To explore whether different categories of meaning, when arranged in a hierarchical order, are associated with different kinds of programme outcome, and identify the dimensions of variation responsible for differences in learning.

1.7. Organisation of the Dissertation

The focus of this study was twofold. Firstly, the goal was to understand how the adventure programming intervention impacted on participants in different ways, and use that knowledge to improve the effectiveness of the programme. The second focus of this research was to provide a demonstration of the value of phenomenography to psychology and adventure programming as a powerful qualitative research tool. To the researcher's knowledge, phenomenography has not
been used before in adventure programming or in the study of psychotherapeutic processes. This is unfortunate, seeing as phenomenography has proved its worth as a tool assisting in the development of more powerful educational interventions (Marton & Pang, 2006; Marton & Tsui, 2004; Lo, 2012). For this reason great care has been taken to ensure sufficient details regarding the philosophy and application of phenomenography are provided in the hope that others will be able to follow in the trail set down within this report.

In chapter two a review of the literature regarding adventure programming is provided, allowing the reader a glimpse of what adventure programming is, the different types of programmes there are, how it is believed that they work, and some of the evidence that exists of their effectiveness. Thereafter, in chapter three, a theoretical and conceptual framework for the study is laid down. Important considerations, such as the developmental level of the participants and the importance of adopting a preventative, salutogenic approach to interventions are touched upon. Also, more importantly, the ideology behind phenomenography and its application, as well as the ontological and epistemological foundation upon which it is built are elucidated in this chapter.

Chapter four describes the methodological characteristics of the study. An effort is made to ensure that clear descriptions of the design, sampling, data collection, confirmability, reflexivity and ethics in the study are provided; and that the motivation for methodological choices made is clearly explained.

Finally, chapter five presents the results of the study, and a discussion of the findings, the limitations of the study, and the implications of this research to adventure programming, and the field of psychology in general.
Chapter 2:
A Review of Adventure Programming Literature

2.1. Introduction

In this chapter, literature is reviewed that allows the reader to form a better understanding of the nature of adventure programming by looking at the different kinds of adventure programmes that exist, how the field has developed over time, and the underlying theoretical frameworks and process models explaining how adventure programming works. This theoretical basis is supported by a review of empirical research into the key mechanisms associated with positive outcomes, as well as the picture created of the effectiveness of adventure programmes based on meta-analyses of available experimental investigations. The literature used in this review has been sourced from peer reviewed journals associated with adventure programming, such as the Journal of Experiential Education, Australian Journal of Outdoor Education, Journal of Adventure Education & Outdoor Learning, and Therapeutic Recreation Journal; from broad searches of literature available from academic databases such as EbscoHost, ScienceDirect, ProQuest, and even Google Scholar; from books acknowledged as source texts in the field, such as Gass (1993) and Schoel and Maizell (2002); and from theses, dissertations, conference proceedings and “grey literature”, which have historically contained a large proportion of the available theoretical discussions and explications on adventure programming.
2.2. Types and Characteristics of Adventure Programming

The school-based, developmental, wilderness experiential programme in which the participants of this study took part, is just one of many types of adventure programme being implemented in South Africa, and in many other countries around the world. In order to understand how this programme is similar to, and how it differs from, other adventure-based programmes the main types and characteristics of adventure programming are explained in the following sections.

2.2.1. Types of Adventure programming

Adventure programming is broadly defined as “the deliberate use of adventurous experiences to create learning in individuals or groups, that results in change for society and communities” (Priest, 1999, p. xiii). It involves the use of specific activities (e.g. games and trust activities), adventure experiences (e.g. hiking and white water rafting), and wilderness or other novel environments (e.g. high- or low-ropes courses), which are encountered as corrective life experiences that provide opportunities for multidimensional growth within the safety of a supportive group system (Alvarez & Stauffer, 2001; Itin, 2001). Although the primary, immediate goal of adventure programming is learning – seen as a shift in the way programme participants think, feel, or behave – the ultimate goal is to develop competence, values, and altruistic traits that enable participants to uplift and empower their communities (Priest, 1999). While adroit adventure programmes do obtain notable outcomes, there is a great deal of variability in outcomes between different studies,
different participants, and different programmes (Hattie, Marsh, Neill, & Richards, 1997). Adventure programming is fortunate to be able to draw on multiple perspectives and expertise from a diverse array of fields including psychology, social work, criminal justice, recreation and leisure studies. This diversity is manifest in the multitude of programmes types, and synonymous titles, that fall under the banner of adventure programming. Examples include adventure-based counselling (Glass & Myers, 2001), adventure education (Berry & Hodgson, 2011), adventurous experiential learning (Heunis & Priest, 2008), adventure therapy (Gass, Gillis, & Russell, 2012), outdoor behavioural healthcare (Russell, 2003a, 2003b), therapeutic wilderness camping (Buie, 1996), wilderness adventure therapy (Bandoroff, 1989), wilderness therapy (Davis Berman & Berman, 2008), wilderness treatment programs (Salisbury, Kay, Peterson, & Peterson, 2013), and wilderness experience programs (Dawson & Russell, 2012). Adventure programmes can be conducted in two main contexts: wilderness and adventure facilities. Facility based programmes can be done indoors or outdoors in an artificial adventure environment, such as low or high-ropes courses (Gass, 1993b; Glass & Mysers, 2001). Wilderness experience programmes (WEPs) are a type of adventure programme that take clients into wilderness or comparable lands for its intrinsic value of naturalness and solitude, in order to develop their human potential through outdoor skill development, personal growth, rehabilitation, therapy, leadership development activities, and/or spiritual renewal (Friese, Hendee, & Kinziger, 1998; Gager, Hendee, Kinziger, & Krumpe, 1998). There are numerous types of WEPs including challenge adventure type programs (like Outward Bound), environmental education programs (like NOLS), university or church-based clubs, survival schools, and spiritual or vision quest type programs. A
broad distinction is made between private placement and adjudicated programmes, and between base camp and expedition models (Russell, 2001). There are two types of expedition programmes: (a) continuous flow programmes, which can be up to eight-weeks in length so instructors rotate in and out of the field, therapists visit frequently, and new clients join existing groups; and (b) contained programmes, which can be up to three-weeks in length and the therapist, outdoor leaders, and adolescent clients remain together for the duration of the programme. Expedition programmes remain in the field for the duration of the treatment process, while base camp programs have a structured base camp, leave on an expedition for a period of time and return to the base camp for follow-up activities (Russell, 1999; Russell & Hendee, 1999). Lastly, programmes can be differentiated based on the depth of intervention ranging on a continuum from recreation (allow participants to experience a positive feeling and enjoyment), education (use adventure to enrich students understanding of important concepts, gain insight into problems and social behaviour, and gaining new attitudes and perspectives on life), enrichment or development (improve functional behaviours, and purposefully address common issues such as self-concept, trust, and communication), adjunctive therapy (treatment blended with existing traditional therapy taking place before and after therapy, addressing primary therapeutic needs), to primary therapy (replaces traditional therapy in order to assess, diagnose, treat, and monitor therapeutic change) (Gass, 1993b; Priest & Gass, 2005).

By the turn of the 20th century Friese et al. (1998) had identified 700 WEPs operating in the United States without counting Boy Scout and Girl Scout troops, camps, community or church recreation programs, commercial outfitters and guides, and adventure travel businesses or wilderness skills instruction or work programs. Of
these WEPs approximately 25.2% offer five or less trips per year, and nearly 40% offer less than 10 trips a year. These serve few clients and are likely to contribute to the high turnover in the industry. A few sizeable WEPs are most popular, and are overrepresented in the literature, media, and research reports. Tangen-Foster and Dawson (1999) resurveyed these and categorised them as educational (43%), personal growth (47%), and therapy and healing (10%). Russell et al. (1999) suggest that there were a minimum of 38 wilderness therapy programmes operating in the US in 2000, costing on average $325 per client per day. In South Africa, at around the same time, an ecotherapy, outward-bound, or similar adventure-based experiential programme could cost between R120 and R300 per participant per day (Steyn, 2005). Russell (2003a) identified 166 programmes that could be categorised as therapeutic, fitting the Outdoor Behavioural Healthcare (OBH) criteria. Of these approximately 46.5% were residential expedition programmes, 23.2% were base camp expedition programmes, 17.4% were contained expedition, and 8.11% were continuous flow expedition programmes. Programme participants were found to spend between 5 and 70 days in the wilderness with continuous flow expedition programmes spending almost all of the programme duration in nature (96% and an average of 62 days), contained expedition programmes spending 75% of their time in the wilderness (average of 28 days), private residential expedition programmes, which tend to be schools, spending only 7% of their contact time in the wilderness (21 days), whereas adjudicated residual programmes spend up to 32% of their programme time on wilderness expeditions (70 days) (Russell, 2003a). In the United Kingdom, there were over 1,500 centres providing adventure experiences by the turn of the 21st century (Institute of Outdoor Learning, 1998). The latest figures coming out of Bowen and Neill's (2013) meta-
analysis relating to adventure therapy suggest that ropes/challenge/adventure-based programmes are the most popular (42.7% of samples) type of adventure programme being studied followed by expedition (26.7%), and then multiple format varieties (21.4%). In terms of national distribution, studies from the USA make up 78.2% of the data, followed by Australia (12.6%), and then Asia and Canada (3.4% each). Figure 1 below, provides a useful model for differentiating between different types of adventure programmes based on depth of intervention, setting characterisation, and intervention duration.

![Figure 2.1: A typology of adventure programmes](image)

2.2.2. Characteristics of Adventure Programming

Adventure programming is often misunderstood and confused with boot camps by those who are not familiar with the basic principles of adventure programming. For example, Muntingh and Ehlers (2006) grouped wilderness
adventure programmes with boot camps and concluded that they are not an effective stand alone diversion alternative for South African adolescents. International research suggests adventure programmes do provide a viable diversion option for youths without deep-seated psycho-pathological roots to their delinquency, particularly because of their usefulness in diagnosing and tracking behavioural patterns, and providing an opportunity for adjudicated youth to experience wellness and rehabilitation while avoiding the contaminating effects of incarceration or institutional care (Association for Experiential Education, 2011; Bruyere, 2002; Kimball, 1993; Newes, 2004; Walsh & Russell, 2010). Other South African studies have evaluated nature-based adventure programmes as being particularly valuable for hard-to-reach and high-risk children, found them to report the highest compliance of all diversion options, and reported good reviews from facilitators, and from participants in follow-ups two years after treatment (Klienhans, 2013; Muntingh, 2001; Skelton & Batley, 2006; Steyn, 2005). The confusion is perhaps the greatest in the public arena, where poorly run programmes and accidents have been popularised. For example, print columnists like Krakauer (1995) and Ross and Schwartz (2007) have written magazine articles that refer to boot camps and wilderness experiential programmes interchangeably, reporting on the deaths of teenagers and warning of emotional and physical abuse. On-line, Teen Advocates USA (2008) maintain a web site in memory of teens that died while attending treatment programmes. Adding to the foray, television series Brat Camp (Frazier, 2005) and the motion picture Boot Camp (Oakes, Frislev, Duguay, & Duguay, 2008) have emphasised boot camp tactics and sensationalised the social and psychological struggles of participants. In reality, while both are based in the wilderness, boot camps and adventure programming have very
little in common. Juvenile Boot Camp Institutions (JBCI) make use of military-type drills, physical work, humiliating punishment, and aggressive or emotional confrontation in order to break down individuals in the hope that they can be built up again to be more compliant. These programmes are aimed at providing a rehabilitative framework, while reducing detention costs and overcrowding (Fuentes & Burns, 2002; Mitchell, MacKenzie, Gover, & Styve, 1999). Adventure programming, on the other hand, aims to provide a safe, nurturing, group environment within the context of wilderness and challenge activities that provide an opportunity for self-motivated positive growth, the development of trust, pro-social attitudes, and self-integrity (Davis-Berman & Berman, 2008; Russell, 2003a, 2006a).

Characteristics common to most forms of adventure programming include the following: (a) a philosophy that challenges and novel environments facilitate growth, but that participants should have choice in regards to participation and that stress is managed within controllable levels (Davis-Berman & Berman, 2012; Neill, 2001); (b) designed to meet the particular needs and goals of the client population (Gillis & Ringer, 1999); (c) follow a positive orientation that aims to provide participants with practical, real-life learning experiences that equip them to lead good, fulfilling lives (Neill, 2001); (d) activities and challenges are structured and deliberately presented in a sequence of increasing difficulty to ensure that participants are stretched only so far as they can handle, and so that growth progressively occurs, ensuring mastery over the course of the programme (Hirsch, 1999); (e) a group focus, with groups normally consisting of between 6 to 14 people who must all contribute in order for success to be attained, and who provide support, feedback and a potent interpersonal context (Newes & Bandoroff, 2004); (f) safety and ethics are highly guarded, and while
physical, emotional, intra- and inter-personal perceived risk is high, the actual calculated risk and potential psychological harm is controlled at a low level (Newes & Bandoroff, 2004); (g) instructors avoid authoritarian enforcement of punishment but rather utilise an abundance of concrete, natural consequences that form part of wilderness living that expose both positive and negative consequences of participants' actions to themselves and the group; (h) are meant to be enjoyable, demonstrating a balanced lifestyle that combines fun with processing and engagement, individual aspirations and needs with those of the group; (i) seek to offer participants an opportunity to partake in a peak experience, bringing them into highly emotive, visceral, transcendent experiences that serve as a culmination of what has been learned in the programme (Csikszentmihalyi & Csikszentmihalyi, 1999); (j) accompanying leaders play a crucial role in modelling adaptive behaviours and healthy relationships, providing participants with the opportunity to engage with a caring adult figure who capitalises on teachable moments, and gives tangible and valued support (Newes & Bandoroff, 2004).

Of all the forms of adventure programming, adventure therapy has arguably experienced the most growth, generated the most research, and is far more regulated that other types of adventure programming. As a consequence of strict credential and association requirements in the US and Australia, private individual therapists are inhibited from offering adventure therapy and it is most likely to be operated within a large organisational infrastructure (Davis-Berman & Berman, 2008). In countries like South Africa, where there is virtually no regulation of adventure programming, it is much easier for private individuals to offer such services (e.g. Rink, 2009; 2012; Young, 2013). As adventure therapy has grown it has sought to establish an
emancipated existence from psychology and education as an alternative therapy in its own right (Williams, 2004). Adventure therapy has evolved into three areas of implementation: (a) wilderness therapy, (b) adventure-based therapy, and (c) long-term residential camping (Gass, 1993a). It is important to note that adventure therapy is not in and of itself better or worse than other forms of adventure programming; it is possible to achieve as dramatic results through therapeutic adventure, and the choice of approach should be determined by the needs of the client and the programme goals (Alvarez & Stauffer, 2001). The main differences between adventure therapy, and adventure programmes aimed at development, which more likely than not may be therapeutic, is that adventure therapy makes explicit the goal or intention to address meta-level behaviours, uses a therapeutic theoretical framework for clinical presenting problems, uses participant assessment and treatment plans, and on-going evaluation of participant progress and outcomes (Williams, 2004).

2.3. A Short Biography of Adventure Programming

Understanding the nature of any phenomenon is never complete without some knowledge of its history. Selected aetiological events contributing the the present character of adventure programming are presented in the next section.

2.3.1. The Origins of Adventure Programming

The earliest records of humans working with nature for healing date back to over 60,000 years ago (Hong-Fang, Xue-Juan, & Hong-Yu, 2009). The Judeo-
Christian, and many other religious systems, teach that humans have shared a special relationship with nature since creation, and chronicle many stories of wilderness trials and rites of passage (Wilkinson, 1980). The ancient Greek philosophers believed that virtues such as wisdom, bravery, temperance and justice are key qualities young people should develop, and that they are best developed through direct and purposeful experience (Hattie et al., 1997; Priest & Gass, 2005). However, as modern society industrialised and urbanised, the merits of physical experience, the value of virtues over knowledge in education, and the role of nature in healing and growth were nearly forgotten. Scientific acknowledgement of the therapeutic benefits of the outdoors was rejuvenated in the early 1900s when psychiatric patients with tuberculosis were quarantined in tents outside Manhattan State Hospital East in New York and showed significant improvement over ward-bound patients. Agnew Asylum, Bingham State Hospital, and Bloomingdale Hospital in White Plains reported similar results and practitioners concluded that there was sufficient evidence to employ the use of camping in the therapeutic treatment of psychiatric patients, igniting a tent therapy movement (Caplan, 1974; Wright & Haviland, 1903). Following the trend of establishing tented camps for psychiatric populations, in 1929 Camp Ahmek in Canada's Algonquin Park became the first camp erected as a venue for effecting social change rather than merely treating psychiatric populations (Davis-Berman & Berman, 2008). In 1932 the Los Angeles County Probation Department implemented its first forestry camp programme for juveniles (Fuentes & Burns, 2002). Recognition of the value of outdoor experience for the development of virtues in education in recent history was most strongly influenced by Outward Bound, which was founded on 4th October 1941 in Wales by Kurt Hahn and Lawrence Holt. Hahn was Influenced by Dr.
George Kerschensteiner who in 1880 advocated for a more holistic approach to education in Germany, and the Country Boarding Schools movement of the early 1920s who similarly placed physical, moral and social education on par with intellectual knowledge. Hahn first implemented these ideals at Salem School in a castle in Baden, South Germany in 1920 with the explicit goal of saving German youth from falling victim to the moral degeneration brought about following World War I. After fleeing Nazi Germany in March 1933 he effectively imported the Salem School system into Great Britain. Then in August 1941 Hahn convinced James Hogan to be the Warden of a training centre that would provide a compelling demonstration of a short-term programme that could help young seamen develop resilience and resolve to face the challenges they were encountering in the Battle of the Atlantic. Holt bought into the idea, and named the programme Outward Bound (Veevers & Allison, 2011). Outward Bound spread rapidly, in 1958 the first institute outside Great Britain was built in Lumut, Malasia and in the 1950s the Outward Bound philosophy was brought to the United States by Joshua Miner with the first school opening in Marble, Colorado in 1962 (Priest & Gass, 2005). Recognising the need for training for instructors, Paul Petzoldt and Ernest Tapley, Outward Bound instructors themselves, founded the National Outdoor Leadership School (NOLS) in Lander, Wyoming in 1965. Then in 1971 Jerry Pieh received a three-year grant to start Project Adventure, bringing adventure learning into the mainstream high-school curriculum (Priest & Gass, 2005). The influence of Outward Bound continued to spread to over 35 countries all over the world and spawned a dramatic growth in the number of programmes for youth based in outdoor settings in the 1970s and 80s (Davis-Berman & Berman, 2008). As programmes proliferated issues of regulation and evaluation
began to arise, and by the 1990s the field had made significant strides towards professionalism. In the US, the Association for Experiential Education (AEE) was formed in the 1970s to allow for networking and communication between outdoor professionals, professional development, and the sharing of ideas and research in the form of the Journal of Experiential Education. In 1994 the National Association of Therapeutic Wilderness Camps (NATWC) was formed, followed by the Outdoor Behavioural Healthcare Industry Council (OBHIC) in 1996, and then the Outdoor Behavioural Healthcare Research Cooperative (OBHRC) and National Association of Therapeutic Schools and Programmes (NATSAP) in 1999 (Davis-Berman & Berman, 2008).

2.3.2. The History of Adventure Programming in South Africa

Heunis and Priest (2008) traced the foundation of adventure programming in South Africa to the early 1900's when Robert Baden-Powell's book on scouting facilitated the formation of multiple groups including the Girl and Boy Scouts movement (1912-1916), Pathfinders for Black, Coloured and Indian children (1931), and Voortrekkers (1931). Initial attempts to start Outward Bound in South Africa failed because programme coordinators refused to adhere to segregation requirements of the Apartheid government (Mundy & Judkins, 2010). In the 1950's Veld and Vlei established a number of outdoor centres operating under the guiding philosophy of Outward Bound (Heunis & Vermeulen, 2004). In 1957 the first group of school boys from St John's College were taken on a wilderness trail at Lake St. Lucia, followed by subsequent groups to both Lake St. Lucia and Imfolozi Game Reserve, eventually
leading to the formation of the Wilderness Leadership School by Ian Player and Magqubu Ntombela in 1963 (The Wilderness Leadership School, 2013). In 1977 a number of outdoor programmes formed a single organisation and were allowed multi-racial gatherings in defiance of the Apartheid laws. Regulation was introduced in 1981 when the South African government required all organised adventure programmes to be registered with the TrimSA Federation. Then in 1986 the Outdoor Adventure and Recreation Centre (ORAT), was built in Oudtshoorn open to all South Africans in order to provide a venue where outdoor leaders could be trained, with the intention of opening more regional centres around the country later on (Heunis & Vermeulen, 2004). In 1987 the Adventure Recreation Association (ARA) was formed to facilitate accreditation and training initiatives (ARA, 2013). Then in 1988 the National Adventure Committee of South Africa (NACSA) took over the responsibility from government of trying to organise and unite the various adventure programmes in the country. In 1992, after the fall of Apartheid, Outward Bound was finally instituted in South Africa by Charles P. Stetson. In 1994 they bought out all the Veld and Vlei centres and established their headquarters in Knysna. Outward Bound undertook to redirect the mission of adventure programming in South Africa to target racial equality, understanding, and cooperative action for marginalised youth. Under this new political shift a number of organisations making use of adventure programming, including EDUCA Africa, USIKO, President's Award Trust, and National Peace Accord Trust were formed (Hansen, 2002; Skelton & Batley, 2006). Towards the end of 1995 the Inter-Ministerial Committee on Young People at Risk, coordinated by NICRO, developed a rites of passage programme called The Journey aimed at presenting youths with challenges through an adventure-based experiential outdoor
intervention model in order empower them to develop the skills needed to take charge of their lives (Van Eeden, 1997). In the late 1990s an inflow of expertise and information helped to promote the organisation and vision for adventure programming with the formation of the Team Building Institute (TBI), a “Train the Trainer” workshop, and Power of Adventure (POA) Conferences with international keynote speakers from the cutting edge of adventure programming practice (Heunis & Vermeulen, 2004). During the POA Conference in 2000, Robertson (2000) outlined plans that would require all facilitators of outdoor adventure programmes to require formal training and registration with the Tourism and Hospitality Education and Training Authority (THETA), under the category of Wilderness Therapy Guiding. Between 2002 and 2005 an ecotherapy module was offered at the honours level by Prof. Naidoo and Gavin Robertson as part of the psychology programme at Stellenbosch University (A. Naidoo, personal communication, September 26, 2013). Similarly, between 2005 and 2009 an ecopsychology module was offered as part of the Bachelors degree in psychology programme at Helderberg College. At present there are a number of organisations offering adventure programming as a therapeutic modality for dealing with trauma, as diversion, for corporate or team building programmes, for development as part of the school curriculum, and as recreation. A short list of examples in the Western Cape is presented in the appendices.

2.3.3. Moving South African Adventure Programming into the Future

In order to ensure advancement and future security of adventure programming in South Africa there need to be sufficient programmes operating at a high level of
sophistication, regulations controlling the use of natural resources, sufficient attention
and procedures in place to manage safety of programme participants, and highly
organised professional organisations that manage certification, accreditation,
competency of leaders and conduct regular programme evaluation (Priest, 1999). Two
of these concerns will be addressed here: (a) ensuring safety and ethics in professional
practice, and (b) making sure that sufficient programmes of high quality and
addressing higher levels of intervention are available to more participants.

Internationally, to a large degree, improvements in the quality, safety
standards, and regulation of programmes was invigorated by the sensationalisation of
fatal accidents that occurred during adventure programmes. On the other hand, they
also led to declines in public perception and subsequent closure of many programmes
(Davis-Berman & Berman, 2008). In South Africa, front page newspaper reports of
wilderness accidents and emergencies are frequent enough to foster public
apprehension about the safety of wilderness adventure programmes (e.g.: Mbuyazi,
2013; Williams, Geach, & du Plessis, 2009). When operated professionally, adventure
programmes are not as dangerous as some may think. Cooley (2000) analysed injury
and fatality data from adventure programmes running activities ranging from mild
backpacking to multi-day hikes, rock climbing, white water rafting, and swimming.
The number of injuries in adventure programmes per 1000 participation days ranged
from 1.99 (dated statistics from high risk activities) to 1.12 (more recent statistics
with wilderness backpacking being the primary activity). In a similar study Russell
and Harper (2006) found that 1 in 55 participants had an injury requiring them to miss
out on activities for at least a day, and programmes reported approximately 1 death
per 1 million participant field days. Cooley (2000) reported that around 75% of
adventure programming injuries were soft injuries like sprains and strains, only 7% would be considered serious. These injury incidence rates are dwarfed by those of high school football games, which have an injury rate of 35.63, with 1.7% of injuries resulting in permanent disability. Adolescents in the US are 2.5 times more likely to die in a motor vehicle accident in their neighbourhood than during an adventure programme while engaging in activities like rock climbing and white water rafting (Cooley, 2000). The US Government Accountability Office concluded that ineffective management, neglect of participant needs, untrained staff, lack of nourishment, and reckless or negligent operating practices played a significant role in the deaths that have occurred during adventure programming (Kutz & O'Connell, 2007). To ensure that serious accidents are avoided, and that clients rights and dignity are respected, adventure programmes adhere to codes of ethics, and strive to attain to best practice guidelines. Important ethical concerns relate to (a) leader's competence, integrity, professional responsibility, respect for people's rights and dignity, concern for the welfare of clients, social responsibility and non-exploitative relationships; (b) programme effectiveness, rate at which issues are raised and resolved, the extent to which details of adventure activities should be revealed during informed consent, and whether participants can refuse treatment; and (c) client needs and goals, existing psychopathology, disabilities or medical conditions, and awareness of prescribed medications and their potential side effects and interactions with the intensity, duration, caloric and food intake, and climatic conditions during programme (Gass, 1993e; Stich & Gaylor, 1993). On the other hand, principles of best practice include: (a) systemic framework; (b) comprehensive assessment prior to programme; (c) treatment planning based on clients needs; (d) flexibility of approach; (e) integration
with case-management and other treatments being received; (f) monitoring of outcomes; (g) intervention is based on a defensible theoretical paradigm; (h) staff have sufficient skill and training; (i) procedures are in place to manage physical and psychological safety of clients; (j) all staff have a working knowledge of ethical issues; (k) interventions are informed by current research and involve ongoing evaluation; and (l) staff receive training to maintain the skills and update their knowledge (Crisp, 2004). In countries with well established adventure programming industries, such as North America and Australia, state regulation, professional membership in accrediting organisations, and credentialling of individuals are used to ensure quality and safety (Davis-Berman & Berman, 2008). In the early 2000s initial steps to introduce regulation and organisation to the industry in South Africa were taken (Robertson, 2000). In 2003 the South African Wilderness Therapy Institute, which was established in 2000 by Gavin Robertson and Yoav van der Heyden, became affiliated with the Psychological Society of South Africa (Hansen, 2002; PsySSA, 2003). Unfortunately, the plans to develop the industry proposed by Robertson (2000) failed to materialise. The POA conferences are no longer being hosted, and there are no laws governing the provision of adventure programmes or qualifications of staff, except for the requirement in the Child Justice Bill that diversion programmes be accredited (Skelton, 2008). THETA is not proactive, and registration is too expensive for small scale providers and so most use the unit standards as guidelines but do not register. The Adventure Recreation Association continues to exist and provide accreditation and training, but membership is entirely voluntary, and they address only educational and developmental programmes. Therapeutic programmes are completely unregulated, as the Wilderness Therapy
Institute is no longer operational (L. Spies, personal communication, September 16, 2013).

Adventure programming in South Africa fits primarily within an entrepreneurial framework (Heunis & Vermeulen, 2004). Only a small number of clients from lower socio-economic strata ever experience adventure programmes, when they do it is largely as a diversion option. A notable exception is the Jamestown Community Project, which provided preventative interventions, including adventure programming, to residents of a small, peri-urban, disadvantaged community (Naidoo & Van Wyk, 2003). Ferguson (1999) laments a similar situation in the US, "our adolescent rites of passage reduced to pay-to-play programs like this one, used not to empower kids as a matter of course but merely to pull back the ones who are standing on the brink, hopeless, all but lost" (p. 35). This is unfortunate seeing as at-risk, economically disadvantaged, and marginalised youth stand to gain the most from wilderness experience programmes (Hendee, 2000). This was recognised by founders of adventure programming; Kurt Hahn has been reported as preferring to see a school shut down than reduce the number of needy students receiving scholarships (Veevers & Allison, 2011). Unless more people have access to such programmes, it is unlikely that adventure programmes will ever achieve their cardinal goal of uplifting society (Priest, 1999). Adventure programmes should be delivered within a positive youth development framework, providing a valuable preventative alternative to mental health services (Jelalian, Mehlenbeck, Lloyd-Richardson, Birmaher, & Wing, 2006). Positive youth development is congruent with the inaugural philosophy of adventure programming, aiming to ensure all children have experiences that nurture positive traits, help them identify their talents and strengths, apply these in fulfilling pursuits,
and become contributing members of their community (Peterson, 2004; Seligman & Csikszentmihalyi, 2000). Adventure programmes provide exactly the kinds of positive affirming experiences and relationships with peers and supportive adults that positive youth development requires (Benson, 1997). Used as a prevention strategy with at-risk youth, adventure programmes have demonstrated effectiveness in developing social competence, school adjustment, general self-esteem, social self-esteem, school self-esteem, and family functioning (Crisp & Hinch, 2004). Similarly, children from the general population who take part in adventure programmes in mid-adolescence have lower levels of depression and anxiety later in adolescence than those who do not (Williams, 2004). The mental health benefits of school based outdoor programmes are particularly strong for boys (Gustafsson, Szczepanski, Nelson, & Gustafsson, 2012). Positive youth development programmes are offered by many different types of institutions and organisations, but schools have a unique opportunity to influence the development of youth (Park, 2004). Weissberg and O'Brien (2004) suggest that with the weakening of social institutions such as family, church and communities – who were historically expected to fulfil the emotional and social needs of youth – the demand on schools to prevent problem behaviours and target positive development has grown. Australia provides a useful model of an adventure programming industry to emulate. They have a number of established accreditation and training bodies, and although there are many independent organisations offering adventure programming, most of the organisation and delivery of these programmes comes from within high schools themselves. It is reasonable to hypothesise that most Australian students would at some point in their schooling participate in at least one camping or outdoor educational programme (Neill, 2001). Australia and South Africa are similar in that
both boast relatively easy access to a vast natural environment with relative close proximity to most capital cities and there is a strong cultural receptivity to sport and outdoor activities. In order for adventure programming to address the many social problems in South Africa and effectively address its mandate, an industry that is organised and ensures high standards of practice and evaluation, is rich in diversity, and boasts many ambitious and innovative adventure programmes that operate within a positive youth development framework needs to be established.

### 2.4. Adventure Programming Models and Theoretical Frameworks

Theoretical models delineating the processes and components of adventure programming serve a number of functions. They make it possible for advocates of adventure programming to explain and defend the value and principles of their programmes, for researchers to be able to conceptualise critical constructs to be measured and identify important variables for inclusion in evaluation, and for educators to improve the training and competence of practitioners. There is general agreement that in order for participants to reap benefits from adventure programmes, practitioners must identify client needs and desired programme outcomes, earmark relevant programme components and activities, and then arrange them in an appropriate sequence that most facilitates targeted outcomes (Bruyere, 2002). Theory underpinning adventure programming makes this possible. Some practitioners may express resistance to putting their programme “in a box” out of fear that some of the mystical and intuitive dynamism inherent the wilderness experiences may be lost. For example, Walsh and Golins (1976) stated that "any codification of the process tends,
by its simplification, to deny access to mystery. Once the idea is delineated, its ability to move out of that mold is decreased" (p. 22). In this sense the theoretical models presented in this section provide a view of some of the processes and components, that when presented in their correct sequence and timing to the right client under the correct circumstances, are believed to underpin learning and psychological change within adventure programming. At the same time it is acknowledged that creativity, flexibility, intuition, momentary flairs of genius, and even chance are sometimes at play in bringing about development and change (Swartz, 2006). The discussion of models will begin with experiential learning models, seeing as the principles of experiential learning are at the heart of any adventure programme (Priest & Gass, 2005). Thereafter, an overview is provided of some of the models that have emphasised the processing and reflection on experience, followed by models that emphasise group processes, psychotherapeutic models that have bearing on adventure therapy, and the section is concluded with a presentation of two concurrent models.

2.4.1. Experiential Learning Models

Experiential learning theories define learning as the process of creating knowledge through the transformation and internalisation of concrete experiences (Kolb, 1984). Experiential learning has been the dominant mode of learning since humans first appeared on the earth (Kraft, 1995). Experiential learning involves facilitation of the creation and transfer of abstract principles, values, attitudes and understandings from concrete experience, which are retained and may be applied and influence future experience and behaviour (Jarvis, Holford, and Griffin, 1998).
According to experiential learning theory, optimal learning takes place when educators place learners in direct contact with experiences that are structured to require problem solving, curiosity, engagement, and inquiry of the learner. Such action learning experiences are supported by educators who select suitable experiences, pose problems, set boundaries, provide physical and emotional support, and facilitate reflection, critical analysis, and synthesis through actively posing questions, and requiring learners to take initiative, make decisions, and be accountable for results (Itin, 1999). Experiential learning in adventure programming utilises novel and unfamiliar environments that place learners outside of their comfort zone in a state of dissonance, which requires self-directed adaptation resulting in growth and learning (Gass, 1993a). The experiential learning activities generally engage learners on multiple levels, including physical, intellectual, emotional, social and spiritual. They challenge them to explore issues of values, relationships, diversity, inclusion, and community. And the learning from these experiences is then used as the basis for engagement in future activities and learning (Itin, 1999). In developmental adventure programmes the experiential learning process is utilised to expose participants to strengths, coping strategies, and makes them aware of internal reserves and resilience that can be harnessed to face challenges in their everyday life-world. When used for therapy, experiential learning is utilised to challenge dysfunctional behaviours and reward functional change, making use of therapeutic activities that carry natural consequences for the client, and utilising reflection as a critical element of the therapeutic process resulting in functional change that has present and future relevance for the client in their home, community, and society (Gass, 1993a). The philosophy of experiential education can be traced back to the work of a number of
influential individuals (Itin, 1999; Kraft, 1995, 1999). Prominent among these is John Dewey, who reflected the progressive education movement in the United States, and emphasised linking experience with reflection. At the core of his thinking was the understanding that education was not simply about transmission of facts but the education of the entire person for participation in a democratic society. Jean Piaget emphasised that four factors are crucial to cognitive development: physical maturation, experiences with concrete objects, social interaction, and equilibration that results from bringing the previous factors together to build and rebuild mental structures. Kurt Hahn took ideas from Plato in terms of the development of the citizen and particularly the citizen's ability to serve the community. His idea was that education should prepare students to be principled leaders. Finally, Paulo Freire influenced experiential education in his belief that education is a tool for social change (Itin, 1999; Kraft, 1999). Based on the principles set down by such theorists, over 17 process models of experiential learning have been proposed to describe the passage of learning from experience through processing to change (Neill; 2004). John Dewey's (1938) three stage model of \( \text{experience} + \text{reflection} = \text{learning} \) was one of the first; but Kolb's (1984) 4-stage model is most probably the most well known. Kolb's cycle starts with \text{concrete experience}, moving on to \text{observation and reflection}, \text{formalisation of abstract concepts} and generalisation, and then to \text{testing implications} of the concepts in new situations. This learning is then transferred to the next experience, where the model starts again. Greenaway (1993) proposed a cyclical four stage model emphasising the role of reviewing in energising the learning process, enriching the experience, allowing participants to assign meaning to their experience, make connections, and develop learning skills. His model cycles between experience,
expression, examining, and exploring. On the other hand Joplin (1981) proposed a cyclical model consisting of five stages that spirals out into another 5-stage cycle and so on: (a) focus stage, where the learner is presented a task and their attention is focused on the specific activity; (b) action stage, in which participants engage in the experience; (c) support stage, whereby educators provide encouragement and security for clients to get through the experience; (d) feedback stage, during which educators provide participants with feedback about their performance strengths and weaknesses; and then (e) debriefing stage, in which participants and educators engage in reflection to help organise and integrate learning. Similarly, Pfeiffer and Jones (1983) also produced a 5-stage cycle model for managing experiential learning. Critiques of stage models have suggested that they are overly simplistic, mechanistic, have limited pedagogic potential for design and management of teaching and learning, separate processes that most likely run concurrently, and fail to take into account the social, historical and cultural aspects of self, thinking and action (Beard & Wilson, 2006; Berry, 2011; Seaman, 2008). A useful information processing meta-model that addresses many of these concerns, pulls together many existing experiential learning theories, and provides a pedagogic framework for the design and management of experiential learning is the Learning Combination Lock (Beard, 2010; Beard & Wilson, 2006; Wilson & Beard, 2003). According to this model a number of factors need to be considered in balance and alignment with one another during experiential learning. The model addresses six learning dimensions: (a) where, when and in what climate or social/political/environmental context, whether real, virtual or imaginary is learning taking place; (b) what kind of learning activity would best suit the kind of learning being targeted; (c) how should the experience be received by the senses of
the learner for it to be most effectively internalised; (d) what is the emotional impact of the experience, ranging from calm pre-contemplation, to determined focused attention, to enthusiastic discovery; (e) how is the mind processing the experience, how is the mind stimulated and engaged, and what kind of thinking is taking place; and (f) what kind of change or transformation, if any, is occurring.

A visual metaphor for this model, presented in figure 2.2, uses six tumblers to represent the various dimensions of learning, and their virtually limitless number of combinations, which should continually be evaluated and aligned to provide for the best 'fit' of learning ingredients for the learner's needs and the programme's envisaged outcomes.

*Figure 2.2: Learning combination lock (Beard, 2010)*
2.4.2. Wilderness Adventure Processing Models

A number of models have been developed to specifically account for the learning that takes place during wilderness adventure experiences. One of the first of these was formalised by James (1980), who suggested that adventure experiences within a wilderness context were in and of themselves sufficient causes of change. This view is supported by ecopsychologists and ecotherapists who suggest that repairing the damaged relationship between psyche and the natural environment is essential for holistic well-being (McCallum, 2005; Roszak, Gomes, & Kanner, 1995; Sevilla, 2006). To a large extent early Outward Bound programmes were based on this model, they aimed to utilise the power of wilderness contexts, and pair this with targeted activities and challenges believed to foster pro-social values, resilience, and other such character strengths (Neill, 2008). Insofar as these outdoor education programmes were honed to the development of character and maturity, rather than academic material or intellectual skills, they are better suited to a psychological model of change than an educational one (Kimball & Bacon, 1993). Within the Outward Bound model, concrete activities should be chosen that create opportunities for problem-solving and cooperation, match the needs and capabilities of the learners, are structured and presented incrementally, are challenging and yet manageable, offer immediate feedback and real consequences, and require learners to engage their physical, cognitive, emotional, and social resources for successful completion (Walsh & Golins, 1976). As a result of their success, as well as a philosophy of expansion, the outward bound model was eagerly adapted by other programmes offering adventure programming, with up to 30% of WEPs being direct adaptations of the outward bound
model (Friese et al., 1998).

As more psychotherapists and educators entered instructor positions, they brought with them cognitive, reflective techniques and group therapy approaches used to highlight critical areas of development within the activities that were being undertaken. They argued that activities and the wilderness context on their own may not be as effective in ensuring transfer of learning or bringing change into awareness (Gass, 1993c). This model, which sought to add processing of the experience to the components already part of the Outward Bound model became known as the Outward Bound Plus (OBP) model. This approach was believed to increase the power of the experience to effect change, but it also required that instructors have in-depth knowledge of the background and capabilities of their clients, and be more prescriptive and technique orientated (Gass, 1993c). The most common method used to process experiences is the debrief. Debriefs generally move through four stages: (a) participants review and describe their experiences, instructors will generally ask participants what they did, how they felt, and how the group reacted to specific events; (b) attention is diverted to identifying patterns and making comparisons – instructors may ask participants to identify highlights and challenges, and discuss patterns; (c) the main lessons can then be related to daily life – instructors may ask participants if the themes that emerged remind them of anything at home or school, how reactions are similar or different, and what they learned that could be used back in their endemic contexts; and (d) propose solutions and examine values – instructors generally ask what clients have learned about themselves and what they would like to change (Hammel, 1993). Not every debrief will move through all of these stages, the instructor must evaluate the level of participant response, the personal impact of the
experience, levels of self-awareness, participants ability to verbalise thoughts and feelings, and the level of sharing for both the group and specific individuals. But with each debrief the opportunity exists to use each disclosure to build trust in the group. Instructors must also carefully choose timing and location. Some contexts almost automatically elicit discussion and contemplation (like the fireplace), whereas others are not conducive at all (at the bottom of a set of rapids) (Hammel, 1993). Despite increasing reflection and transfer of learning, the OBP model has the disadvantage of being reflective rather than proactive (Gass, 1993c).

In order to address this limitation a model was proposed in which instructors “frame” the outlook of clients before the activity utilising metaphors focusing on analogous structures between adventure experiences and client's learning needs. This allows the experience itself to take primacy in nurturing change, rather than cognitively and verbally burdened post-processing. By directing clients attention to aspects of the experience pertinent to their needs, instructors may foster actual change during the activity. To be successful metaphors must hold clients attention, have a successful outcome, be isomorphic, and be related with sufficient detail for clients to attach personal meaning to the experience (Bacon, 1983). Gass (1993d) proposed a seven step sequence for developing isomorphic experiences appropriate to specific client needs in a given situation: (a) state and rank the specific client goals of the activity based on the needs of individual clients and the group; (b) select an adventure experience with strong metaphoric associations to identified goals; (c) ensure that the experience has a successful resolution in contrast to client's real life experience; (d) adapt the activity's framework (introduction, rules, processes) to strengthen isomorphic correspondence; (e) check to ensure the metaphor is compelling enough to
engage the client's attention; (f) conduct the experience and make revisions to highlight isomorphic connections; and (g) use debriefing to reinforce positive behaviour changes, re-frame negative interpretations, and transfer functional change to client's lifestyles. Disadvantages of the metaphoric model are that including both framing, activity and debriefing in the programming increases the complexity of the instructors task, more assessment is needed to be prescriptive in tasks, and the analogies and isomorphism between the experience and client's lives are not always easily discerned by clients or by instructors. Indeed, in order for frames to be truly isomorphic, instructors must have accurately understood clients' life-worlds and make sure that frames take into account individual differences. Finally, framing potentially limits the breadth of outcomes by limiting the focus on specific issues within the activity, possibly bypassing alternative interpretations and aspects of the experience (Gass, 1993c).

Although framing the experience using isomorphic metaphors is appropriate between 80-90% of the time; when a student is resistant to direct frontal approaches therapeutic paradoxes can be used (Bacon, 1993). In this approach situations are structured to cause a positive double-bind. The fundamental quality of the therapeutic paradox is that it must draw participant's attention to aspects of the situation from a specific perspective that challenges participants to either abandon their worldview or give up on the literal experience. In such a situation a choice must be made, and whichever option is chosen, it is not possible to rebel against a perceived position of the instructor so both options lead to compliance and positive outcomes. Bacon (1993) warns that this is an advanced technique and should be used with caution, but when used in the following forms it becomes fairly accessible: (a) prediction of
failure – e.g. “hardly anyone manages this, so it's OK if you don't do it”; (b) restraining comments – e.g. “We are gonna have to take it really easy here because it's a very difficult section that we might not complete until nightfall”; and (c) utilisation – e.g. “I'm impressed with your ability to resist the desire of the group, what makes you able to stand your ground here, and how could you use these same resources when friends try and pressure you into doing stuff you don't want to back at home”. Great care must be taken when using these techniques not to appear uncaring or sarcastic, and ensuring that all predictions of failure or restraining comments are honest and accurate (Bacon, 1993).

2.4.3. Group Stage and Adaptation Models

Seeing as group interactions and the person-in-group-in-environment perspective form a fundamental component of learning in adventure programming, understanding how groups function is vital (Schoel & Maizell, 2002). A classical model of group development, formed primarily from studies of therapy progression, suggests five stages of group development: forming, storming, norming, performing, and finally adjourning (Tuckman & Jensen, 1977). Cassidy (2007) proposed a model that may be more applicable outside therapeutic contexts, and focuses on practitioner concerns, rather than group outcomes. In her model practitioners initially emphasise individual concerns, then group concerns, followed by purpose concerns, work concerns, and finally termination concerns. Another approach to group development emphasises adjustment to the “culture shock”, and associated responses such as homesickness or anger, group members experience when entering a novel physical
environment with new social norms and people from diverse backgrounds (Fabrizio & Neill, 2005). The stages of adaptation in this model include: (a) *honeymoon or tourist* stage (coinciding with the forming stage); (b) *crisis or culture shock* phase (coincides with the storming stage); (c) *adjust and reorientation* stage (coincides with the norming stage); and (d) *adaptation, resolution or acculturation* phase (coincides with the performing stage) (Fabrizio & Neill, 2005; Tuckman & Jensen, 1977; Winkelman, 1994). Ideally this process should be educational and developmental, but groups can fail to progress in their development for a number of reasons. Important aspects that can influence the development of groups include the nature and order of tasks, the perceived social norms espoused by the programme, and the leadership style and intervention of programme staff. Also, group development is seldom as linear as suggested by stage models (Dexel, 2009).

The group activities should be structured to provide progressively more challenging goals so as to provide groups with opportunities for success and the development of skills, and thereby facilitate positive group functioning and development (Bisson, 1999). However, affirming activities can be derailed if negative group norms like apathy, defiance or hostility begin to play out. In order to facilitate positive group interactions, foster healthy group development, and create a nurturing programme environment a full value contract can be used (Scheol & Maizell, 2002). The contract consists of six principles that should be discussed between the group members and facilitated by the programme leaders so that, ideally, participants feel ownership of these group norms: (a) *be here* – requires participants to be drawn into deeper levels of affiliation with the group and involvement in activities, involving being at the least physically present in the activity, participation, connection, and
having fun together; (b) **be safe** – involves continual attention to safety and taking responsibility, making a commitment to one's self and the group, maintaining healthy boundaries, and forging relationships with the group and leaders; (c) **commitment to goals** – involves identifying chosen goals, taking initiative in developing solutions and strategies, accessing help that is needed, and evaluating outcomes and obstacles; (d) **be honest** – involves each member assessing their own and others' strengths, weaknesses and potential value; providing feedback from a positive place that is caring, concrete, concise, and clear; and encouraging participants to value and learn from others' perspectives; (e) **let go and move on** – involves challenging participants to accept challenge and risk, accept the positive and negative aspects of the situation and use forgiveness to let go, accept the vulnerability and insecurity of transition and change, and then move forward to a better way of being; and (f) **care for self and others** – involves negotiating a balance between self care by pulling on the support of the group and spirituality in the various forms it is experienced, and other centred caring by serving the needs of the larger community (Scheol & Maizell, 2002). The relative involvement and style of leadership enacted by programme staff is likely to influence group development and emotional response (Rothwell, Siharath, Badger, Negley, & Piatt, 2008). Positive adaptation can be facilitated by pre-experience preparation, support structures during the experience, experiential exercises such as role plays, and post-experience debriefing (Fabrizio & Neill, 2005). The style of leadership and roles leaders must play are largely dependant on the stage of development the group is in, and the individual goals and needs of the group at any given time. McPhee and Gass (1993) provide a model that describes five stages of group development, as well as the common interactions, and instructor roles for each
stage. Although the model provides a useful framework to consider the pressing needs and activities the group may be involved in at any given point during the adventure programme, McPhee and Gass (1993) emphasise that leaders must bear in mind that individual needs and goals that may be separate from the group, and that individuals may jump backwards and forwards through stages.

Table 2.1

McPhee and Gass' (1993) adventure programme group development model

<table>
<thead>
<tr>
<th>Stage</th>
<th>Group interactions</th>
<th>Instructor roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Pre-affiliation</td>
<td>- Anxiety</td>
<td>- Clearly define programme expectations and goals for the group</td>
</tr>
<tr>
<td></td>
<td>- Fear of expectations</td>
<td>- Solicit individual's fears and hopes</td>
</tr>
<tr>
<td></td>
<td>- Examining goals and</td>
<td>- Relate issues of power and control to the purpose of the group</td>
</tr>
<tr>
<td></td>
<td>expectations of group</td>
<td>- Help to clarify what is appropriate and acceptable behaviour</td>
</tr>
<tr>
<td></td>
<td>members</td>
<td>- Enforce limits when needed</td>
</tr>
<tr>
<td>(2) Power and Control</td>
<td>- Individuals seek boundaries and affirmations for their behaviour</td>
<td>- Support positive achievements</td>
</tr>
<tr>
<td></td>
<td>- Ambivalence to joining the group</td>
<td>- Suggest areas where growth is needed</td>
</tr>
<tr>
<td></td>
<td>- Group cohesion starts and</td>
<td>- Help to clarify the function of the group</td>
</tr>
<tr>
<td></td>
<td>group norms and values are</td>
<td>- Leaders begin to relate new behaviours to situations outside of the group</td>
</tr>
<tr>
<td></td>
<td>established</td>
<td>- Encourages individuals to be flexible in their group's roles</td>
</tr>
<tr>
<td></td>
<td>- Begin to question the role of the leader</td>
<td>- Is supportive yet begins to represent more societal views</td>
</tr>
<tr>
<td>(3) Intimacy</td>
<td>- Individuals understand the roles they play in the group</td>
<td>- Clarify gains that have been made</td>
</tr>
<tr>
<td></td>
<td>- Understand how their group is different to other groups</td>
<td>- Prepare individuals on how to meet their needs without the group</td>
</tr>
<tr>
<td>(4) Differentiation</td>
<td>- Individuals may feel lost without the group</td>
<td>- Encourage individuals to commit to continuing with gains they've made</td>
</tr>
<tr>
<td></td>
<td>- Individuals may regress or flee in attempts to deny the emotional impact of the group</td>
<td></td>
</tr>
<tr>
<td>(5) Separation</td>
<td>- Members review their experiences in a comparative manner</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Help transfer the group learning to home environments, set goals, and identify resources and support systems to ensure carry through</td>
<td></td>
</tr>
</tbody>
</table>
Another model that is useful for understanding how leader roles and style need to adjust according to the group's developmental phase is proposed in the Conditional Outdoor Leadership Theory (COLT, Priest & Chase, 1989). According to this theory, an autocratic leadership style, which involves making decisions and then convincing the group to follow you, is most appropriate during the forming and adjourning stages of group development. A democratic leadership style, in which decision-making power is shared between the leader and the group, is most appropriate during the storming and performing stages of group development. While an abdicratic leadership style, in which leaders delegate decision-making responsibility to the group, is most appropriate during the norming stage of group development. At different times during the groups development concern for the task and relationship dimensions of activities will fluctuate from high to low (Priest & Chase, 1989). These variations are illustrated in the figure below:

![Figure 2.3: Conditional Outdoor Leadership Theory (Priest & Chase, 1989)]
2.4.4. Clinical and Psychotherapeutic Models

Adventure and wilderness experiential programmes have been heartily accepted by many therapists because of their intrinsic appeal to adolescents normally resistant to therapy, usefulness in assessment and diagnosis, plasticity, ability to capitalise on client's strengths and perceived or real limitations, ability to influence resistant personality and clinical concerns within a short-term intervention, ability to strengthen clients resilience and pro-social attitudes, positive impact on physical health and self-image, and ease with which traditional techniques can be adapted to an outdoor context (Caulkins, White, & Russell, 2006; Clark, Marmol, Cooley, & Gathercoal, 2004; Ewert & Yoshino, 2011; Faddis & Bettman, 2006; Gass et al., 2012). However, not all clinical issues can be addressed in wilderness settings, or using adventure activities. Bettmann and Jasperson (2008) suggest that clients with psychosis, patterns of violent behaviour, sexual perpetration, patterns of severe suicidal behaviour, serious eating disorders, severe conduct disorder/antisocial behaviour, severe borderline personality traits, an IQ below 90, or medical conditions like diabetes should not take part in traditional wilderness experiential programmes. Nonetheless, specialised programmes have been developed to address some of these exact problems (eg: Eikenæs, Gude, & Hoffart, 2006; Sommervall & Lambie, 2009).

Wilderness therapy process theory generally consists of descriptions of programme process and theoretical programme orientation (Russell, 2006b). Programme process is fairly consistent across programmes, and consists of three stages: (a) in the cleaning phase clients are removed from destructive environments and intense cultural stimuli (dress and music), eat a minimal but healthy diet, engage in intense physical exercise, and are taught basic survival and self-care skills, using
the wilderness context and natural consequences as the primary teaching mechanism;
(b) in the personal and social responsibility phase natural consequences and peer interaction are strong therapeutic influences, helping clients to learn and accept personal and social responsibility, while leaders and group feedback allow participants to reflect on the personal and interpersonal cause and effect dynamics of client's experiences on camp and back at home; and (c) the transition and after-care phase, during which programme staff help clients articulate their learning and goals, prepare to return to their home environments, face challenges and develop strategies for transferring the lessons learned to their own lives (Russell et al., 2000). The theoretical psychotherapeutic orientation, on the other hand, varies from programme to programme, and therapist to therapist (Russell, 2006a). Various therapeutic models and concepts have been used to structure counselling and facilitation practice during adventure therapy including Gestalt, Narrative, Jungian, Psychodynamic, and even Buddhist Psychology approaches (Allen-Newman & Fleming, 2004; Gilbert, Gilsdorf, & Ringer, 2004; Trace, 2004; Wilcox, 2004). Narrative therapy suggests that people enact life scripts, and the goal of wilderness therapy is to encourage clients to articulate their life stories, and using empowering and affirming experiences, to rewrite a new plot for their story (Davis-Berman & Berman, 2008). The very nature of adventure and wilderness, coupled with successful resolution of physical, emotional and social challenges, allows participants to re-conceptualise themselves as conquerors and heroes. Jungian approaches, which are very popular among South African ecopsychologists, view humans as being motivated by a drive for wholeness, called individuation, and the culmination of this process as transformation. Archetypal imagery and symbolism are used extensively in the therapeutic construction of the
experience, which is designed to facilitate the individuation process (Robertson & De Kiewit, 1998). Wilderness areas are seen as the perfect terrain in which to foster the individuation process due to the inherent drive towards wholeness in nature and the link with the archetype of sacred space. Closely aligned to Jungian approaches are transpersonal theories, which stress the higher human needs such as spirituality and the development of human potential. Nature provides an optimal context in which to experience a sense of awe, inner calm, silence, connection, and other spiritual needs as a process of transformation (Brown, 1989). Wilderness leaders using this approach often make use of techniques such as meditation, relaxation, rhythmic walking, symbols and myths from Eastern religions, mysticism and Jungian theory in order to facilitate interpersonal growth (Davis-Berman & Berman, 2008, Wilcocks, 2004).

Possibly the most common therapeutic models to be used across different programmes and contexts include self-theory, social learning theory, systems theory, and the methods of cognitive behavioural therapy (Davis-Berman & Berman, 2008). Self theory, as espoused by Carl Rogers (1959), places premium importance on increasing unconditional positive regard from members of the group, leading to an increase in participant's positive self regard (Davis-Berman & Berman, 2008). Groups are contracted not to “discount” one another, creating an environment where participants feel safe to be vulnerable, lower defence mechanisms, and learn to behave with more congruence between their actual self and their experiences, increasing self-regard and adjustment (Schoel & Maizell, 2002). The unusually high levels of support and encouragement created by such contracts are particularly salient for women, who are more accustomed to giving than receiving support and encouragement (Fredrickson & Anderson, 1999). One of the reasons for the impact of therapeutic
social groups is that societal social status identifiers, such as race, socio-economic status, or residence serve no benefit in the wilderness context; instead cooperation, integrity, sharing and other such characteristics and behaviours ensure group success and successful interactions within the group. Individuals learn they are valued for the skills they can share, and their contribution to healthy group functioning, rather than for what they have. Using a phase system, in which positive behaviour and learning allows students to progress through phases that are associated with greater responsibility and rewards or privileges, may also increase the motivation of students to model positive behaviour (Russell & Farnum, 2004). Within this environment that allows for freedom of expression, safety, fairness, justice, and orderliness participants are presented with challenges aimed to create opportunities for them to experience flow or peak experience (Csikszentmihalyi & Csikszentmihalyi, 1999; Maslow, 1954). When such an experience occurs participants experience a lapse in self-consciousness, act spontaneously, expressively, and with a sense of control, freedom and happiness. Such experiences leave participants with a sense of achievement and renewed belief into their own ability and potential (Davis-Berman & Berman, 2008; Goble, 1976). The opportunity for adolescents to assume a position of responsibility and competence, allows for them to be seen in a more favourable light by their families and themselves, and is a powerful force for change (Bandoroff & Scherer, 1994). Because adventure programmes create many positive experiences, wilderness therapists have the opportunity to use cognitive behavioural techniques to challenge negative or pessimistic thoughts, focus on present achievement, and internalise success while viewing it as global and permanent (Davis-Berman & Berman, 2008). Participant learning is fostered in the context of beliefs such as safety, challenge, trust,
freedom, belonging, effective communication, and enjoyment or fun. Programme facilitators in adventure programming must be receptive to issues related to these beliefs, and strive to bring them to the group for reflection and assimilation (Alvarez & Stauffer, 2001). As participants become aware of their own learning, their sense of their own worth and potential increases. According to social learning theory performance attainments, observing the performance of others, verbal persuasion and other types of social influence, and physiological states may all positively impact on self-efficacy (Bandura, 1982). In traditional therapy verbal persuasion is the technique most often used, but it has limited value. On the other hand, performance attainment is the most effective, and together with observation forms an integral process in the adventure programming framework. Within the wilderness context participants take direct responsibility for their own well-being and experience direct, natural consequences as a result of their actions. For example, adhering to wilderness leader's instructions regarding packing one's backpack means the rain poncho is easily accessible when it starts raining, whereas ignoring the instructions results in avoidable discomfort that can be blamed on no one else but one's self. Positive social modelling consistently reaps rewards, and observing others being rewarded results in vicarious reinforcement of an internal locus of control and interpersonal trust (Davis-Berman & Berman, 2008; Rotter, 1954). In addition to group support, participants experience secure and nurturing relationships with wilderness leaders that contradict previous dysfunctional attachment models while introducing new, corrective life and emotional experiences. Programme staff must help with the loss of being separated from attachment figures back at home, and from the emotional arousal that results from the re-evaluation of those relationships (Bettmann, Olson-Morrison, & Jasperson, 2011).
Leaders can make use of transitional objects (such as a letter with instructions or comments) in order to maintain a feeling of safety and connection for participants, and should facilitate positive reunions with families at the end of the WT programme (Bettmann & Jasperson, 2008). All of the processes and components of adventure programming are normally viewed within a systems theory framework. From a systems framework adolescent's problems are seen to occur within the context of a family and community context, and the relationships and dynamic of these contexts play a role in maintaining, exacerbating, and alleviating problems. Whereas aggression, social withdrawal, or substance abuse are common coping mechanisms rewarded at home, they do not function during adventure programmes, while pro-social attitudes, communication, and adaptive behaviours that were not directly reinforced in these other systems are reinforced in wilderness groups (Davis-Berman & Berman, 2008). This brief review attests to the fact that there are many therapeutic processes and theoretical frameworks that can be enacted during the adventure therapy process.

2.4.5. Concurrent Models

Stage models fail to capture the gestalt nature and complexity of adventure programmes, inaccurately suggest that processes occurring in one stage are absent in others, ignore the cyclical nature of the psychotherapy process, and fail to account for interactions between processes. To address these concerns some authors have proposed concurrent models. Russell and Farnum (2004) propose a concurrent model that acknowledges that similar therapeutic factors may be present throughout the
adventure programming process, although at different levels or intensities. They suggest that three interrelated and mutually influential factors, constituting the "wilderness therapy milieu" are important: (a) wilderness, which has its time of peak intensity during the beginning of the wilderness programme, (b) physical self (physical fitness and well-being, and tasks associated with wilderness living), which relates to activities or processes that facilitate learning and growth, and peak in intensity during the middle and towards the end of the programme, and (c) the social self, which refers to variables associated with social interaction and the formation of close interpersonal relationships that peak in intensity late in the programme. Similarly, Hoyer (2004) proposed a model that attempts to take into account many of the intra- and inter-personal dynamics, and sees problems and their solutions as occurring within the individual, within the system, and between the two. This model represents a number of significant processes that occur during adventure programming and is represented in the table on the following page:
<table>
<thead>
<tr>
<th>Process Aspect</th>
<th>Theoretical Perspective</th>
<th>Levels of Development</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stages of Psychological Development</strong></td>
<td>Maslow – Hierarchy of Needs (3rd Revision)</td>
<td>Safety (protection, security, order, law limits, stability)</td>
</tr>
<tr>
<td></td>
<td>Biological / Physiological (air, food, drink, shelter, warmth, sex, sleep)</td>
<td>Belongingness &amp; Love (family, affection, relationships, work group)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Esteem (Achievement, status, responsibility, reputation)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-actualisation (personal growth and fulfillment)</td>
</tr>
<tr>
<td>Kohlberg – Stages of moral development</td>
<td>Level I: Pre-conventional / Pre-moral Responds to external motivation. Obey rules to (1)</td>
<td>Level II: Conventional / Role Conformity Internalises the standards of authority figures and obeys rules in order to (3) please others or (4) maintain order</td>
</tr>
<tr>
<td></td>
<td>avoid punishment, or (2) gain a reward</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stage 1: Obedience and punishment orientation</td>
<td>Stage 2: Naively egoistic orientation</td>
</tr>
<tr>
<td></td>
<td>Stage 3: Good-boy / Good-girl orientation</td>
<td>Stage 4: Authority and social-order-maintaining orientation</td>
</tr>
<tr>
<td></td>
<td>Stage 5: Contractual / legalistic orientation</td>
<td>Stage 6: The morality of individual principles of conscience</td>
</tr>
<tr>
<td>Giligan – Stages of the Ethic of Care</td>
<td>Individual Survival “Do what is best for me”</td>
<td>Self-sacrifice is good to maintain relationships</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Do not hurt others or self</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transition from selfishness to a sense of responsibility for others</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transition from a focus on goodness to a realisation the he/she is a person too</td>
</tr>
<tr>
<td><strong>Stages of Change and Small Group Development Strategies of Intervention</strong></td>
<td>Prochaska &amp; DiClemente</td>
<td>Pre-contemplation</td>
</tr>
<tr>
<td></td>
<td>Tuckman &amp; Jenson</td>
<td>Contemplation</td>
</tr>
<tr>
<td></td>
<td>McKenna</td>
<td>Preparation</td>
</tr>
<tr>
<td></td>
<td>Denial (External) Blames others and rejects input</td>
<td>Action</td>
</tr>
<tr>
<td></td>
<td>Compliance (External) Follows rules and expectations but resists real change</td>
<td>Maintenance</td>
</tr>
<tr>
<td></td>
<td>Admission (External) Outwardly admits but inwardly resists (try beat the system)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Acceptance (Internal) Willing to change rather than resist. Stops trying to figure it out, but still experiences trouble. Utilises treatment to make changes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Integration (Internal) Views self as needing change. Integrates treatment changes into daily life</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Barrett</td>
<td>Creating a context for change</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Challenging patterns and expanding realities</td>
</tr>
<tr>
<td><strong>Programme Models</strong></td>
<td>Outward Bound</td>
<td>Training</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Main</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Solo</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Final</td>
</tr>
</tbody>
</table>
2.5. Mechanisms of Change

The effectiveness of any intervention can be maximised by first identifying and then capitalising on the key mechanisms that contribute to change. In a thorough review of evidence-based research on adolescent psychotherapy, Rosenfeld (2009) identified eight elements, which in and of themselves are sufficient causes to account for change in psychotherapy. They include: (a) utilising evidence-based techniques and avoiding discredited ones; (b) client characteristics such as competence, social skills, support structures, resilience, motivation to change, involvement in treatment, and ability to accommodate new information and experiences; (c) the therapeutic alliance, composed of personal (nurturing, warmth, self-disclosing) and professional (insight-oriented, helpful, confronting, collaborative) aspects, which accounts for more than half of the beneficial effects of psychotherapy; (d) the therapist's characteristics such as friendliness, warmth and genuineness, positive regard, empathy, support, and having faith in the client and treatment plan, which also have a stronger relation to outcome than treatment technique or orientation; (e) common processes present in most techniques, such as making use of learning principles, disconfirming irrational beliefs, being listened to by a caring person, shifting the client's attention, focusing on an acknowledged problem, activating client self-observation, keeping track of problem behaviours, providing clients with encouragement to change, and a supportive environment; (f) extra-therapeutic forces, such as joining a supportive community, new recreational activities, adopting alternative home and work patterns, use of self-help resources such as bibliotherapy and support groups, and accessing appropriate, success-proven educational programmes; (g) problem-related factors, such as whether disorders are more biologically based or
environmentally situated, the severity and duration of problem behaviours; and (h) the placebo effect, which is a significant contributor to change, probably explaining about 15% of the variance in treatment outcome. Similarly, Peterson (2004) has identified the following as truisms contributing to the effectiveness of exemplary positive youth development programmes: structured is better, earlier is better, sophisticated is better, good is better, broad is better, and more is better. Various studies have demonstrated congruence between the mechanisms of change identified by researchers interested in adolescent therapy, such as Kazdin and Nock (2003) and Rosenfeld (2009), positive youth development programmes (Peterson, 2004), and those factors identified as being essential to successful adventure programming (e.g. Russell & Phillips-Miller, 2002; Wichmann, 1993). A multitude of mechanisms impacting on programme effectiveness have been identified by participants, facilitators, and theorists in the adventure programming literature. Some of these include: time for solitude in the wilderness allowing for attunement to nature and self; helpful and caring facilitators that counter typical adult roles; activities that are intrinsically motivating and provide opportunities for peak experience; a supportive group that provides safety, positive social norms, and immediate, quality feedback; participants are receptive and ready to grow; perceived risk that creates optimum levels of physical and psychological stress to allow for positive coping; a novel environment that provides a break from prevailing cultural norms and influences; internalisation and transfer of wilderness experiences and metaphors to participants' daily lives; the age of participants; being provided with and making a choice to be challenged; difficult yet attainable goals; direct assessment opportunities and reassessments of individual's coping methods; a mode of operation that is more action centred than verbal; structured to clients needs;
holistic change that impacts on intellectual, emotional, social, and spiritual levels; clear natural consequences; a salutogenic orientation; and programme duration, intensity and level of intervention (Bowen & Neill, 2013; Eggleston, 1998; Gass, 1993a; Hattie, 1993; Hattie et al, 1997; Hendee, 2000; Hendee & Pitstick, 1993; Kornelson, 1996; Newes & Bandoroff, 2004; Phillips-Miller, 2002; Priest & Gass, 2005; Russell & Farnum, 2004; Wilson & Lipsey, 2000). Most of these, like client characteristics and therapeutic alliance are common to all interventions, while some are unique to adventure programme, such as wilderness environment and intrinsically motivating adventure activities (Newes & Bandoroff, 2004). In the interests of space, only six of the many possible mechanisms of change will be considered in the sections that follow.

2.5.1. The Therapeutic Power of Wilderness

For centuries poets, philosophers and theologians have been teaching about the healing and educational value of nature and wilderness spaces. Wilderness is not simply a barren space devoid of human inhabitants – indigenous peoples are known to have lived in symbiotic harmony with nature creating a more accurate portrayal of wilderness (Northcott, 2005). In the last few decades, as the destruction of this resource has been made clearly evident in political and media spheres (Gore, 2006), academics and researchers have become significantly more active in producing literature and research, most theoretical and some scientific, about the relationship that exists between the human psyche and nature. Dawson and Russell (2012) point out that “the research documentation is slowly growing to support the notion that
nature and wilderness does provide restorative visitor experiences” (p. 132). This knowledge is also slowly beginning to influence the education and practice of some therapists (Davis & Atkins, 2004). There are four main attributions made as to the aspects of wilderness that lead to therapeutic benefits: (a) nature is inherently healing, there is an intrinsic connection between time spent in nature and the well-being of the psyche; (b) wilderness living is challenging and requires one to develop competence and resilience that are beneficial to health living; (c) wilderness is free from artificial distractions, allowing for solitude, relaxation, contemplation and reflection; (d) the uplifting aesthetic properties of entities in nature provide opportunities for all the senses to be stimulated and sensitised, without overburdening our cognitive resources.

The idea that nature is inherently healing is based on “a premise that land nourishes both the flesh and the spirit and a conviction that neither is much good if either is ill" (Wildland Research Center, 1962, p. 27). This premise has been taken up and promulgated by the field of ecopsychology, which suggests that alienation from nature is dysfunctional, whereas connection is healing (Shepard, 1982). Ultimately, connecting with nature is seen as connecting with something closer to our core than anything spawned from our techno-scientific ingenuity. Nature, like us, wields tremendous power and at the same time is feebly delicate. It is able to speak to the highest virtues such as harmony, beauty and love, but in it is also found cruelty, suffering and self-seeking. Nature is one possible mirror to our own soul, which more than any other space, is able to connect us with healing and growth. Ecopsychology has drawn contributions from a vast array of professions and fields of thought including philosophers, anthropologists, psychologists, historians, deep ecologists, environmentalists, ecofeminists, and transpersonal schools such as animism and
shamanism, but has resisted becoming rooted in any specific discipline (Schroll, 2007). Unlike Sigmund Freud, Harold Searles, and Carl Jung who described our psychological alienation from the natural world as normative and irreversible, ecopsychologists suggest that this unnatural alienation brought about by socialisation into modern society impacts the body-mind-spirit organism in wholeness diminishing ways (Clinebell, 1996). Ecopsychologists use extensions of objects relations theory to suggest that biophilia, the need to affiliate deeply and closely with the earth and its creatures, is coded into our psyche and genes in an ecological unconscious or unconscious inner wilderness (Clinebell, 1996; Roszak, Gomes, & Kanner, 1995). From an evolutionary perspective, we evolved out of nature, and deep within the most primitive recesses of our psyche, lies a connection to our roots, an ecological unconsciousness that awakens when situated within nature and makes us aware of a fundamental connection between all living things (McCallum, 2005). From a Creationist perspective, we were created in and from nature, God designed nature to envelop and nourish our entire being, while giving us the responsibility to nurture it and act as its custodians (Zygmont, 2008). Others like Metzer (1995) suggest that ecological intelligence is not something that will emerge from the unconscious, it is something that must be experienced and learned. Children are particularly susceptible to experiencing unity with nature, an intuitive sense of being interconnected with others and the world at large, and can possibly benefit most from nature's embrace (Barrows, 1995; Melson, 2007). Nature is one of those places adolescents instinctively seek out as a means of regulating unpleasant and pleasant feelings, to process the coherence of self-experience, and feelings of self-esteem (Korpela, 1992). In summary, ecopsychologists suggest that there is a "self-transcending reality
immanent in the awesome creative in nature", which can be understood "using religious concepts or think of them as marvels explicated by science" (Clinebell, 1996, p. 8).

Other researchers have emphasised that wilderness is filled with risk and challenge, demanding growth to attain mastery, which itself requires responding appropriately with all our physical, emotional, intellectual, and spiritual energies (Dregson, 2004). Akhurst (2010) suggests that times of struggle in the wilderness may predispose greater contact with the wildness within, levels of self-disclosure and intimacy that are deeper than in other contexts, and bridge the divisions within and between ourselves and others. Wilderness requires adaptation, collaboration, and learning for survival and comfort, rather than these being required by an arbitrary authority. The learning opportunities that are experienced in this context are concrete, simple and immediate compared to the complex social contexts of normal life. Furthermore, development in outdoor contexts is holistic, necessitating the development of both hard skills, for example starting a fire and map reading, as well as soft skills, such as resolving conflicts in the group and motivating others (Priest & Gass, 1997). Entering wilderness areas with minimal supplies and assistance is adventurous, and may contribute to a spirit of adventure in everyday life (Lewis, 2005). When wilderness is paired with natural consequences and the pressure to succeed at concrete tasks, defences and denial tend to break down and create opportunities for healthy identity formation, which come to fruition as participants experience success and are exposed to positive role models (Kimball & Bacon, 1993). Wilderness is also physically demanding, leading to development of endurance and strength, which in turn improve self-image and confidence. Exercise also acts as a
healthy outlet for aggression, anxiety, and stress. Being in a better physical condition can stimulate motivation for continued fitness. As Miles (1993) puts it “in a world seemingly bent on taking the physical exertion out of every action, wilderness travel can give us a forceful reminder of what we are losing” (p. 54).

Another aspect of wilderness that contributes to therapeutic gains is that life in the bush is simplified and stripped of artificial distraction and stimuli (Kimbal & Bacon, 1993). Wilderness contexts allow one to juxtapose everyday principles and behaviours against those adopted in the wild to measure the ordinary against the superlative and thereby regain perspective (Wildland Research Center, 1962). Seeing as it is so different from the artificial, stressful environments we create for ourselves, wilderness provides one of the best settings to readjust and recover (Russell & Farnum, 2004). Wilderness allows people to break from routine relationships and contexts and provides a novel environment compatible with flow and competence (Miles, 1993). Because there are no distractions vying for our attention we can experience tranquillity and solitude, creating a space where contemplation and reflection are possible.

The last aspect of wilderness that is seen to contribute to positive change is its aesthetic, archetypal, or even spiritual/transcendent aspects (Kimball & Bacon, 1993). Kaplan and Kaplan (1989) describe the processes of being away and soft fascination as central to positive experiences of nature. This is when involuntary attention is engaged by the sights, sounds and smells of nature, but does not tax resources or cause mental fatigue as does conscious directed attention. This is described by Trace (2004) as follows: “When we step out of the everyday world and slow down, we slow down everything – our nervous systems, our minds, our emotional rhythms, and our
sensory intake. When our bodies are not so overwhelmed, we can move toward embodiment and away from dissociation” (Trace, 2004, p. 109). From a Jungian perspective wilderness is sacred space, a place pervaded by power, mystery, and awesomeness that cannot be inhabited, but that when visited may lead to empowerment and change (Miles, 1993). In numerous studies participants have cited the aesthetic, and uniquely natural quality of wilderness as contributing to their treatment success (e.g. Mossman & Goldthorpe, 2004; Riley & Hendee, 1997; Russell, 2000).

When any of these components are experienced, participants can form an affinity for their person-place interactions that allows them to experience within wilderness a “sense of place”, which in and of its own can also add value to any experience in the wilderness (Fredrickson & Anderson, 1999). Overall, there is general consensus that wilderness does contribute positively to adventure programmes, with the majority of WEPs maintaining that wilderness areas are crucial to their success (Dawson, Friese, Tangen-Foster, & Carpenter, 1999; Russell et al., 1999). However, increased use of wilderness areas for adventure programming has created some concerns amongst ecologists. In a survey of 241 wilderness managers Gager et al. (1998) found that 67% felt that WEP usage was increasing in their area, and 42% were concerned about the lack of wilderness stewardship skills and knowledge of WEPs. The wilderness managers recognised that WEPs are beneficial in raising clients self-confidence, good wilderness ethics, and an awareness of the natural environment and its processes; but approximately two thirds didn't think WEPs needed to operate in designated wilderness areas. In like manner Greenway (1995) cautions against wilderness being used as a commodity for therapists, and asks
“if we do use wilderness, let us use it in ways that further its rehabilitation as well as our own. Let us use it for those healing processes that cannot take place anywhere else” (p. 135). In order to balance the concerns of ecologists and adventure programme coordinators, Russell et al (1999) suggest that WEPs should make more use of primitive fire-making in pre-established areas, gas stoves for cooking, and strict leave-no-trace principles. Some research does suggest that centre-based team-building programmes may be more effective than wilderness expeditions for developing personal effectiveness (Greffrath, 2009; Greffrath, Meyer, & Monyeki, 2008). However, the authors note that the ability of wilderness to create a nurturing context and environment conducive to growth is not easily captured using quantitative instruments but is ubiquitous in qualitative accounts. Other research, using a variety of methodologies, has demonstrated that nature plays an important mediating role in the value of being outdoors (Ryan et al., 2010).

2.5.2. Intrinsically Motivating Adventure Activities

Most therapeutic modalities for adolescents struggle with waning teen interest and engagement in counselling activities (Rosenfeld, 2009; Davis-Berman & Berman, 2008). Unlike office-bound “talking therapies” adventure programming activities tend to be perceived as engaging for youth, and are designed to be experienced as fun (Schoel & Maizell, 2002). The activities are arranged in a sequence of escalating difficulty providing for progressive development of skills and knowledge, with the choice of activity being based on the level of group cohesion, intermediary and long term goals, and the ability of the participants (Glass & Shoffner, 2001). Outdoor
pursuits are particularly appropriate for adolescent males who feel uncomfortable with emotional expression and verbal interaction, but have an intrinsic need for physical activity, taking risks, and proving themselves through competition (Bruyere, 2002). Adventure activities provide freedom of choice among a wide range of uncertain outcomes, allow participants to creatively fashion some limited task within the limits of their abilities, and ensure that they achieve a level of involvement such that the consciousness and application of the task at hand blend and become indistinguishable facilitating the experience of flow (Mitchell, 1983). Instructors may use strategies to bolster engagement such as: (a) inspiration – empower students with uplifting ideals or the rewards of success; (b) support – encourage participants both verbally and non-verbally; (c) reasoning – discuss the needs and benefits of striving for development and growth; and (d) confrontation – point out the consequences and desirable outcomes of behaviour (Bacon, 1993). Enjoyment forms a pivotal rallying point for many adventure activities, and must balance out the tension and perceived physical risk or social-psychological threat posed by activities (Schoel & Maizell, 2002). Most activities are structured to ensure success, but failure also provides opportunities for learning new responses to one's own and other's disappointment. For example, especially important is for leaders to model positive laughter, that kind that doesn't come by pulling down someone else (Schoel & Maizell, 2002). The adventure activities foster the formation of new identities as they tend to cast youths into a new role, that of hero (Kimball & Bacon, 1993). Not only activities, but also equipment are chosen primarily for the value they may add to the programme goals, and then secondly for their durability. In many programmes simple clothing and equipment has specifically been chosen so as to provide experiences that teach decision making,
problem solving, responsibility and interdependence, rather than using modern equipment that is designed to promote independence (Bowne, 1993). Most learning taking place in adventure programming could be referred to as first order change, change resulting from overt, structured, specific and action-orientated learning. Nicholls (2004) suggests that significant change can also result from second order change, the learning taking place during quiet, action-free, non-facilitated time in a wilderness space. Such second order change often takes place when participants watch others struggle and develop empathy, a greater understanding of others, and a re-visioning of self; when participants have time alone in which they can feel free, alive and in touch with themselves, engaging in embodied knowing rather than intellectual rationalisation; and in moments like when sitting around a fire, which provide a safe space for the sharing of personal history, thoughts, feelings, and the nurturing of friendships, self-awareness, and confidence (Nicholls, 2004).

2.5.3. Processing and Reflection

There has been a fair amount of debate within adventure programming about whether wilderness and adventure experiences can result in learning in and of themselves, or whether reflection and facilitation are needed for learning and transfer to take place (James, 1980; Neill, 2002). Nadler and Luckner (1992) suggest that processing of experience is the cornerstone of every adventure-based experience, and when absent such experience is doomed to remain in the realm of recreation. The enjoyment and exotic nuance involved in adventure programme activities may lead to greater participation, but without in-depth processing or guided reflection might not
contribute to significant change (Pace, 2003). Lord (2007) states that "what makes adventure learning so powerful is that the experiences are visceral and involve some degree of physicality … but they're only as good as the facilitation that is conducted during or immediately after the program" (p. 178). Wichmann (1993) points out that the ability to process and solve problems, as developed in many group reflective and processing activities, is a stronger predictor of post-programme behaviour than instructor experience and expectations. Processing is particularly important because when participants experience disequilibrium during an adventure experience and apply some new behaviour to manage that conflict, unless they are aware of the psychological challenge they faced and what they actually did to overcome it, learning will not take place and the new behaviour will not be transferred to other situations (Nadler, 1993). The most common form of processing is the group debrief following a specific activity, or at the end of the day (Smith, 1993). Debriefing normally follows three steps: (a) analysis – focus on what happened, the story, without making judgements of attributions; (b) identification/generalisation – meaning is assigned to the actions taken, defining positive and negative behavioural impact on the group; and (c) application – participants discuss how they can apply what they've learned both to the next activity, and also to their real-world situations as well (Lord, 2007). Debriefs can only be used once the group has established trust and when they are capable of verbalising their feeling and thoughts. Prior to this other forms of processing can be used such as setting time aside for relaxation and introspection; activities such as solo, journalling and guided imagery to facilitate introspection; forming dyads or triads that can talk about their experiences while learning to trust and listen; and structured group activities such as group-building
tasks, feeling exchanges, or other non-verbal group exchanges (Smith, 1993). One of the most conducive contexts for processing to take place is in front of a camp fire at the end of the day's activities. A camp fire creates a relaxed atmosphere where youths are more likely to feel safe to share their feelings, even with sensitive topics such as sexual abuse (Kjol & Weber, 1993). Rather than only debriefing after the activity, participants awareness can be guided to salient moments and processes before the activity through the use of metaphor, isomorphic framing, or front-loading (Alvarez & Stauffer, 2001; Kimball & Bacon, 1993). For example, Russell (2000) describes how participants benefited from discussing group processes and goals prior to going on a solo, and then being provided with therapeutic curricula that help them maximise reflection during their time alone. The archetypes and metaphors used in such processing must be believed by the instructors on a personal and professional level in order to be meaningful for the group. Schoel and Maizell (2002) warn that “often it is much easier to do than to think and talk about what we do … kids resist talk; adults, while they tend to talk a lot, resist “real” talk” (p. 233-235). When facilitating processing and reflection instructors must tap into their knowledge of what the groups norms, background, goals, and processes are in order to direct and utilise cognitive work regarding previous discussions, “real-life” issues, and how these present or play out in the process of adventure. Leaders must be careful not to react to quickly to silence, it may be resistance, mental exhaustion or inactivity, or creative thought and reflection. The leader should provide the structure and initiative for the debrief, but place the onus on the group for discussions and solutions. When initiating the debrief, Schoel and Maizell (2002) suggest six important questions that should guide the instructor: (a) which “drawing out” technique would be best to use? (b) which issues
need attention; (c) which participants need attention; (d) how far should the metaphor be extended and into which areas; (e) what kind of deepening is possible; and (f) how directive does this group need their leader to be? In most cases leaders work in teams and discuss these questions before calling a debrief, try and work it so that the group says what they want to be said before they do; approach the discussion from a “participant role” and only sometimes speak from the “outdoor leader” role. At times the leaders may need to redirect conversation, or cut-off inappropriate or irrelevant discussion. Generally, debriefs should not exceed an hour and a half, and should be balanced by at least two parts experience to one part processing (Lord, 2007). It is important that outdoor leaders respect and demonstrate empathic listening to the experience of every participant that encounters a powerful emotional experience associated with an adventure activity. At the same time facilitators should not engage in psychological levels deeper than they have training to work with, and that are not part of the group's agreed upon purpose. Ringer and Gillis (1995) propose levels of psychological depth that can be engaged based on the language used in group interactions: (a) at the surface level participants generally talk only about other people, and tend to enact the shallowest and most rigid aspects of socially defined roles; (b) participants at the personally experienced level describe personal experiences of themselves in a particular social role, professional classification, or position in society; (c) at the current task level, the focus of the group is on events in the group of which they are part of at that moment, with content focused on activities and events; (d) the encounter level is when interactions between group members become the topic of discussion, and members begin to explore their perception of themselves that arises from engagement in the adventure experience; (e) at the
contextual level, group members think about and discuss their relationships with people who are not necessarily part of the group but are significant to them in their regular daily lives, and how their adventure experiences may impact on or be transferred to their everyday lives and relationships; (f) the identity formation level is where group members explore and possibly reshape their sense of self; (g) the cultural/historical level involves discussing and examining how one experiences themselves as a member of or is shaped by their culture of origin, their cultural heroes, cultural history, gender, sexual orientation, race or nationality; and (h) the final level is the existential level, which refers to discussions in which participants grapple with existential issues of life and death, issues of meaning and being, and spirituality. This level requires leaders to be very solid and have a well developed ego strength in order to contain the group's anxiety and distress about ultimate meaning and purpose. Ringer and Gillis (1995) suggest that recreational groups spend most of their time in the surface level and current task levels. In groups contracted to goals of education or development, facilitators will often work extensively at the encounter and contextual levels, and while discussions may sometimes flow between other levels, they will try and maintain a psychological depth between these two levels. When the goal is psychotherapy, leaders will progressively guide discussions to the identity formation level and will deliberately probe and engage in sustained work at this and deeper levels. As a general rule, when a group member moves the discussion to a level of psychological depth much deeper than the agreed upon group goals, the person's statement must be fully acknowledged and given the appropriate empathic concern it deserves, then the conversation should be re-framed in the encounter level until a point when the group can move back to the contracted level (Ringer & Gillis,
2.5.4. Perceived Risk

Erickson (1968) suggested that adolescents face a developmental crisis of identity vs role confusion, when forming a sense of bodily identity and a sense of one's social roles become important activities. Part of this process of coming to terms with one's changing body, and experimenting with new roles and identity, involves risk taking behaviours. Adolescents are particularly vulnerable to risk taking behaviour as a means of handling stress, social control, and to feel part of a group (Daughters, Gorka, Matusiewicz, & Anderson, 2013; Veermersch, T'Sjoen, Kaufman, & Van Houtte, 2013). South African adolescent females are more likely to engage in risky behaviour to fit in with a social group, whereas adolescent males use risky behaviour as a means of achieving social status (Gleeson et al., 2008). Unfortunately, society provides few safe and positive risk taking alternatives, and most of the risks adolescents experiment with have potentially negative outcomes. Adventure programming provides an environment with high levels of perceived risk, allowing participants to engage in risk to test social roles while developing a healthy bodily identity (Davis-Berman & Berman, 2008). Luckner and Nadler (1997) propose that when people experience a state of dynamic tension, the negative internal state of disequilibrium that results from an external challenge, they will either act to avoid facing the challenge or will enact internal change in order to return to a state of perceived safety and stability. This process is utilised in adventure programming as follows: (a) the client enters the programme with preconceptions and goals. They then
experience a state of (b) disequilibrium when they realise that old patterns of behaviour do not work, and by being placed in a (c) novel setting, which heightens arousal, and a (d) cooperative environment, characterised by experiences of bonding, shared goals, and time for positive interaction while being presented with (e) unique problem-solving situations. These are presented in a sequence of increasing difficulty, requiring the group to draw on their joint resources. Successful completion of these tasks leads to (f) feelings of accomplishment, which reinforces cooperation and self-confidence. These feeling are then augmented by (g) processing the experience using various strategies which promotes (h) generalisation and transfer to future endeavours (Nadler, 1993). Challenges and perceived risk are believed to create the possibility for flow, and the development of resilience. This becomes possible when the challenges in a situation push an individual's physical and psychological boundaries, the person believes they have the ability to deal with the situation, and they feel deeply involved in the experience, highly motivated, cognitively efficient, and are truly enjoying the experience (Csikszentmihalyi & Csikszentmihalyi, 1999). Neill and Dias (2001) compare this process to inoculation, during which a patient's immunity is developed by controlled exposure to a pathogen.

There have been a number of criticisms levelled against Luckner and Nadler's (1997) model. Berman and Davis-Berman (2005) caution that it may be unethical to induce anxiety and stress among participants already at risk or suffering from poor mental health. For most clients just being in the wilderness is stressful enough. Inducing further distress and anxiety may be debilitating, forcing clients into a survival mode in which deep seated change is unlikely, and any changes are unlikely to be internalised and repeated in participant's characteristic home and social
environments. Davis-Berman and Berman (2008) suggest that change is more likely to occur in a place of comfort, security, and acceptance rather than in high tension situations. They point out that in order to attain to Maslow's (1954) peak experience, people need to enjoy and be "at one" with what they are doing, their safety and esteem needs need to be met in order to reach this level. Berman and Davis-Berman (2005) suggest that each participant should be assessed, and the perceived level of risk should be kept within the client's perceived ability to cope, and activities chosen that enhance safety, security, and the participants awareness of strengths they posses that allow them to respond well to the programme challenges. Davis-Berman and Berman (2008) suggest that instead of focusing on risk, emphasis should be placed on social dynamics, creativity, and reflection in order to more effectively foster positive change.

Another perspective is that different kinds of perceived risk can be at play during adventure programmes. According to Ewert and Yoshino (2008) perceived stress may be both positive (challenge) and negative (threat), and when each is paired with the right kind of coping, psychological growth is likely to occur. They suggest that problem-focused coping is most appropriate for challenging situations, whereas social support is most valuable when situations are viewed as threatening. In general, problem focused coping strategies are more effective than emotion-focused, or avoidance strategies (e.g. MacCann, Fogarty, Zeidner, & Roberts, 2011). The goal of adventure programmes should therefore be to provide sufficient difficulties and risk to stretch participants, but frame these risks as challenges to be handled using problem-focused coping. At the same time the perception of threat or danger should be minimised, and further diminished by providing adequate social support (Mitchell, 1983; Ewert & Yoshino, 2008). This view is supported by participant reports that
suggest that the confidence they develop on adventure programmes results directly from having overcoming challenges they describe as the most difficult thing they have ever had to do (Russell & Phillips-Miller, 2002).

2.5.5. Therapeutic Alliance in Adventure Programming

Adolescents are among the most "difficult" clients to work with in therapy because they tend to be reluctant to engage, may be ill-equipped to express their thoughts and feeling verbally, and often express a lack of trust for adults in authority positions. In the wilderness this is likely to be actively and intensely engaged, creating rich opportunities for therapeutic interactions (Hill, 2007). Research suggests that non-confrontational and caring leaders are a necessary but not sufficient condition for growth on wilderness experiential programmes (Harper, 2009; Russell, 2000). Participants generally view the relationships established with outdoor leaders as one of the central processes responsible for change in adventure programmes, and generally report that they could just "sit and talk" with adventure counsellors, and experience more trust, respect and confidence in their adventure leaders than they would for therapists in traditional settings (Mossman & Goldthorpe, 2004; Russel & Phillips-Miller, 2002). In order to build rapport and trust in adventure programmes, and ensure participants and leaders can relate to each other, it is important that instructors accompanying adolescents on adventure programmes eat the same food, carry the same weight in their packs, encounter the same obstacles, and endure the same weather conditions as the adolescents in their group. Instructors that live with adventure programming populations are more effective than those who rotate in and
out periodically (Harper, 2009). Living the experience with programme participants breaks down the resistance to authority that some adolescent males may exhibit, and the dependence and complacency that keeps some adolescent girls from aspiring to leadership and self-actualisation, while fostering rapport, trust, and openness through the dismantling of the counter-therapeutic hierarchy often present in teacher-student, or therapist-client relationships (Kimball & Bacon, 1993). Being in the same context and going through the same experiences while displaying natural leadership qualities gives leaders the opportunity to model adaptive and pro-social qualities and behaviour (Kimball & Bacon, 1993; Newes & Bandoroff, 2004). Because they play such a crucial role, adventure programme staff must be skilled in hard skills (e.g. first aid, map reading, and belay techniques) and soft skills (e.g. debriefing, conflict resolution, and framing). The core competencies all outdoor leaders should have include: (a) foundational knowledge, (b) self-awareness and professional conduct, (c) decision-making and judgement, (d) teaching and facilitation, (e) environmental stewardship, (f) programme management, (g) safety and risk management, and (h) technical ability (Martin, Cashel, Wagstaff, & Breunig, 2006). Generally as participants and facilitators enter the programme they form initial perceptions of one another based on prevailing stereotypes. As they interact more, and positive psychological shifts occur in participant's behaviour and perception of the wilderness programme, so relationships tend to deepen (Botha, 2007). The adventure programme and positive interactions with clients are also likely to confer benefits such as leadership skill and responsibility to young adults participating as camp counsellors (McNeely & Ferrari, 2005). Different programmes are likely to place different demands on programme staff, depending on the type of programme. Larger wilderness therapy organisations
are more likely to have more staff with at least a 4-year college degree than are small-sized agencies or medium-sized agencies who employ more high-school leavers without more advanced qualifications. However, medium-sized agencies generally keep one psychologist and one psychiatrist on staff, whereas fewer larger agencies and even less small agencies employ staff with these qualifications (Fuentes & Burns, 2002). Instructors often report experiencing challenges associated with their work, particularly regarding their relationships with friends, partners and family. The main factors affecting them are pressure to perform, compromises made for work, feeling disconnected from home, and missing out on time with family and friends (Marchand, 2008).

2.5.6. Supportive Group Context

The last important mechanism contributing significantly to growth and change on adventure programmes to be discussed here is the supportive group context. The peer dynamic on wilderness experiential programmes has been identified as one of the most important contributors to change (Goldenberg & Soule, 2011; Russell, 2005; Russell and Phillips-Miller, 2002). The groups provide a supportive environment, provide a regulatory function as well as constructive feedback, and a safe space in which to attempt new coping and communication behaviours. Neill and Dias (2001) suggest that social support accounts for around 24% of growth in resilience encountered in adventure programmes. Using multiple linear regression they found that the level of support provided by the least supportive member of the group significantly predicted resilience gains. These findings highlight the importance of
considering the relationship between group process and individual growth. Particularly, how individuals who chronically engage in negative social exchanges with others in the group create an ethical dilemma between the optimisation of learning benefits for a whole group versus the needs of the particular individual involved (Neill & Dias, 2001). Instructors must ensure that group dynamics and interactions remain uplifting and reinforcing by ensuring the basic rules of group processing are adhered to, not by dictating them as rules to the group, but by modelling them, reinforcing them, and noting deviations from them. These rules include the following: (a) everyone belongs to the group, no matter what; (b) connectedness is necessary for the group to achieve its aims; (c) everyone listens to everyone, their words and feelings should be validated; (d) non-verbal language is important; (e) goals include honesty and congruency in sharing interactions; (f) it is not solely the leaders role in facilitating growth and healing, the entire group has healing capacity; and (g) everyone needs to take part in decisions in some way (Smith, 1993). While a sense of community and group cohesion do develop as a result of shared emotional and physical trials in wilderness contexts, characteristics like group trust, positive communication methods, and positive group norms should be progressively and purposefully developed using experiential tasks that foster these group characteristics (Breunig et al., 2008; Glass & Benshoff, 2002; White & Dinos, 2010). Through guided group discussion and interaction in the face of real challenges, the adolescents learn that the power of a supportive group is greater than the sum of its individual constituents, and this realisation establishes the therapeutic milieu (Kimball & Bacon, 1993).
2.6. Goals and Outcomes of Adventure Programmes

As mentioned earlier, adventure programmes can be distinguished based on their goals, from recreation to primary therapy (Priest & Gass, 2005). Because these various programmes share many of the same activities, some overlap in outcome is expected. But because the way these activities are framed, experienced, and processed differs, there will also be some outcomes experienced in one programme that are not experienced in another that engages in the same activities. Outcomes will also vary according to the presenting problems of clients, and the nature of their relationships with parents and school. Russell (2000) suggests that the greater the depth with which self-identified goals can be described by clients both before and after the programme, the more likely they will be successfully implemented in the future. While there are many claims produced in the literature, and programme documentation, regarding the goals of programmes, the extent to which these are achieved is not always clear. Davis-Berman, Berman, and Capone (1994) suggest that one third of adventure programmes have no outcomes evaluation at all. The most prominent outcomes discussed in the literature include the development of various aspects of self-concept, and the development of appropriate and adaptive social skills (Moore & Russell, 2002). Other outcomes that are also often cited include: the development of problem-solving skills, self-discipline and resilience that prepares youths to face the challenges that they will encounter back at home; a stronger bond between participants, their families and communities; adolescent developmental needs such as self-esteem, risk-taking, competition and the development of self-identity; a greater awareness of their behaviour and feelings; a desire to change for the better, to be a better person; and a
commitment to abstain from drugs, alcohol or other damaging behaviours (Bruyere, 2002; Russell & Phillips-Miller, 2002). The adventure programme outcomes discussed in this section are arranged in increasing programme level specificity, in other words the first few are more likely to be experienced in all programmes, whereas the last are most likely to be experienced mainly in therapeutic programmes. Towards the end of this section meta-analyses of the research conducted across various outcome domains are presented, and research findings and methods are then discussed, and recommendations made.

2.6.1. Improvements in Physical Health and Body Image

Most programme participants engage in more rigorous physical exercise, requiring physical strength and endurance, than they are used to at home. At the same time most programmes will also provide participants with a minimal, but healthy diet (Davis-Berman & Berman, 2008). Physical exercise is an important component of adventure programmes and has been positively linked to improvements in physical health, depression, anxiety, stress responsiveness, mood state, self esteem, premenstrual syndrome, and body image (Carek, Laibstain, & Carek, 2011; Scully, Kremer, Meade, Graham, & Dudgeon, 1998). South African adolescents can definitely benefit from additional formal programmes with an exercise component. Population surveys suggest that 41.5% of South African students do not perform sufficient exercise in order to get any sort of health benefit, even though 65.6% have physical education on their school timetable for one or more days a week. On the other hand, 29.3% of adolescents watch more than 3 hours of television every day,
and 19.7% are overweight (Reddy et al., 2010). Tibbits, Caldwell, and Smith (2008) conducted a longitudinal survey of 1239 economically disadvantaged Cape scholars from the beginning of grade 8 to 10. They found that 71% of males consistently took part in physical activity whereas the majority of females (55%) were sedentary and only 36% consistently participated in physical activity. Males who stopped doing sports generally did so in the 8th grade, whereas females generally stopped in the 9th grade. One of the most significant findings of their survey was that youth who did not participate in sports by the 8th grade generally did not begin participating in later grades. Males and females who initially did sports but stopped had the highest risk of marijuana use, and females that became sedentary at grade 9 had highest risk of academic failure, whereas consistent physical activity was associated with the best academic outcomes. Research by Gleeson et al. (2008) on South African adolescents in the Western Cape shows both males and females engage in physical activity because of intrinsic factors – males see physical activity and facing up to challenges as part of masculinity, whereas females value relatedness and companionship that can be developed through participation in sports and other group physical activities. Males are also more likely to see participation in sport as an alternative to risky behaviour (Gleeson et al., 2008). Seeing as women are less likely to participate in sports or other strenuous physical activity, longer adventure-based wilderness programmes have been found to be particularly valuable in developing physical health, resulting in increased physical strength, coordination and competence and associated self-concept improvements (Caulkins et al., 2006). Especially for older, female participants the physical aspect of adventure programming allows them to get in touch once again with their physical capabilities and gives them a renewed sense of their bodies.
Wilderness programmes can be used to challenge traditional gender stereotypes, or if structured to promote competition and the dependence of physical strength, can reinforce them (Anthonissen, 2011). However, attending a wilderness experiential programme does not automatically result in significant increases in activity. Using pedometers and self-report questionnaires, Hickerson and Henderson (2008) found that participants with sedentary lifestyles at home were also less active on camp, and females only tallied 78% of the steps males did even though boys and girls did not differ significantly in where they spent their free time. For this reason physical activity must be structured into the programme activities for the health benefits to be accrued.

2.6.2. Self-Concept and Character Development

The founding principle of adventure programming, as espoused by Kurt Hahn, was to develop character strengths, such as compassion and resilience, in programme participants (Priest & Gass, 1997; Veevers & Allison, 2011). Experiential education as a philosophical approach to education was developed to train students that would be responsible citizens (Itin, 1999). Subsequently, self-concept and the development of appropriate and adaptive social skills are the most studied constructs in adventure therapy research (Hans, 2000; Russell, 2004). Crisp and Hinch (2004) reported significant influences of adventure programming on variables related to self-concept, and suggested effect sizes of 0.28 for social competence and school adjustment, 0.27 for general self-esteem, 0.19 for social self-esteem, and 0.34 for school self-esteem. Studies on resilience, determination or persistence have found that these constructs
increase significantly as a result of adventure programme participation, and together with outdoor recreation efficacy are significant predictors of post-programme self-efficacy scores (Neill & Dias, 2001; Schenk, Widmer, Duerden, & Burraston, 2008). These outcomes have a neurological grounding, resulting from progressive reinforcement of neural pathways that foster adaptation and resilience (Allan, McKenna, & Hind, 2012). Positive experiences with peers during wilderness experiential programmes are also associated with higher levels of optimism (Orejudo & Puyuelo, Fernández-Turrado, & Ramos, 2012). Outdoor adventure programming may also provide a valuable tool for shaping healthy patterns of masculinity and femininity. Many studies have shown that women reap positive mental, physical, and spiritual outcomes from participating in outdoor experiences (Caulkins et al., 2006; Fredrickson & Anderson, 1999). Programmes tailored to women's needs provide an opportunity for girls to challenge social gender stereotypes and conventional norms for femininity, and promote positive gender identity development. Women are given space to explore traditionally masculine traits such as decision-making and leadership, while seeing value in feminine skills such as cooperation and considering the needs of others (Anthonissen, 2011; Whittington, 2006). Whereas most girls report moving away from relationships with other girls during adolescence, single-gender wilderness programmes provide an opportunity for girls to form meaningful relationships with other girls, and develop social skills, patience with others, and an increased comfortableness with different groups of women. Research conducted on South African Outward Bound participants has found statistically significant improvements in 12 of the 15 variables measured, including servant leadership, virtuousness, religiosity, self confidence, effective problem solving, goal setting, conflict resolution,
general leadership, engagement with community, cooperative teamwork and sense of environmental stewardship. Collectively the 15 variables measured showed an effect size of .341 from pre-test to post-test. Interestingly, religiosity had the biggest difference, followed by engagement with the community, and servant leadership and virtuousness. This supports the value of adventure programmes for not only identity formation, but social values and compassion as well (Mundy & Judkins, 2010). Similarly, Human (2006, 2012) has described how adventure-based activities during professional training in psychology led to intra- and inter-personal growth among South African students. As a result of their experiences participants felt that their psychological and/or physical personal boundaries had been stretched, they had an increased understanding of their intra-personal worlds, interpersonal capabilities, a greater understanding of their ability to handle anxiety, and had grown in self-esteem.

2.6.3. Psychosocial Learning and Strengthened Relationships

Human (2006, 2012) suggests that by experiencing situations in which one must trust others, many people used to self-sufficiency open themselves up to a new experience, and may benefit from the development in interpersonal relationships that arise from such a shared experience. Similarly Hattie et al. (1997) have found that adventure programmes significantly improve participants' social skills, particularly in the domains of social competence, cooperation, and interpersonal communication. Russell (2004) cautions that there are many studies providing strong support for the development of more socially adaptive and cooperative behaviour, but that many of these are based on anecdotal evidence and have significant methodological
limitations. Nonetheless, there are some more robust studies providing evidence of psychosocial learning during adventure programmes. For example, in their study of 252 adolescents who took part in Catherine Freer Wilderness Therapy Expeditions, Harper, Russell, Cooley, and Cupples (2007) noted significant improvements in 7 out of 8 behaviour items for males, and 6 out of 8 for females, with items causing significant problems at admission showing the greatest improvements. Improvement in social relations was significant for both males and females for choosing appropriate friends, but not involvement in activities. A year after the programme, gains that had taken place during the programme were still significantly improved over the scores during intake.

Improvements in social skills are often carried over to improvements in peer and family relationships. Rancie (2005) suggests that most participants have poor insight into their faults at the commencement of adventure programmes, but that after several weeks in the wilderness they “recognized, at least in part, where they needed to improve to achieve a more harmonious relationship with their parents, family, and others, as well as with themselves” (p. 27). This supports Russell's (2003b) findings that parents generally rated their children's improvements more than twice as favourably than the children did their own behaviours, largely because of differences in the ratings of admission scores rather than discharge scores. He also found that parent and children's scores tended to converge at one year follow-up, and that most of the gains had been maintained. Similarly, Crisp and Hinch's (2004) found that at-risk youth's ratings of communication and cooperation in their families all improved at post-test, and continued to improve at the three months follow-up. While clients felt that some gains made from participating in the programme were lost by follow up,
such as general feeling, parents reported improvement on all aspects of family functioning. Harper and colleagues (2007) also found significant improvements in family relationship indicators such as family arguments and involvement in chores for males and females. A year after the programme improvements had remained fairly stable on all items measured except for family eating dinner together and family spending time together which regressed significantly. However, it is not uncommon for individual changes in adolescents to fail to result in drastic changes within the family system, and for initial treatment outcomes to show some relapse at follow-up (Harper et al., 2007). Generally, the youth who show marked improvement are those with higher levels of severity going into the programme, those who have had less contact with other agencies before starting the treatment, and those whose parents were actively involved in post-treatment interventions (Mossman & Goldthorpe, 2004). When programmes are structured to allow parental involvement, at least for a portion of the programme duration, almost all parents tend to report satisfaction with the effectiveness of the programme (Bandoroff & Scherer, 1994). Parental involvement helps adolescents transition back home and improves family's attitudes towards one another. However, parents should not accompany their children when families are dissolving, severely dysfunctional or chaotic as they have no form of structure to overcome stresses and challenges posed in a wilderness context (Bandoroff & Scherer, 1994).

Programmes can be specifically structured in order to develop family, peer, and community relationships. For example, Eggleston (1998) describes a programme based on beliefs and principles that originated in the Maori culture. By enacting cultural rites and strengthening ties with traditional belief systems, community
cohesion, interdependence and respect is fostered. Another example is the use of wilderness therapy to help former militarised youths in South Africa deal with their trauma and to reintegrate into their communities (Robertson & De Kiewit, 1998). During the early 1990s the members of the military structures of liberation movements were viewed as heroes, but as violence escalated and South African politics moved into a reconciliation phase they became marginalised, stigmatised, and seen as enemies of the community (Langa, 2007). Traditional forms of therapy were shunned as as a result of youth's suspicion of authorities, fear of having to reveal their part in killings, and the stigmatisation of people making use of mental health services. Instead, the wilderness therapy trail made use of ancient traditional African myths and rituals, and upon their return efforts were made for the community to reintegrate the youths into new roles as mentors and role models in their community (Robertson & De Kiwiet, 1998).

2.6.4. Spiritual and Religious Development

Acknowledgement of the value of wilderness for recreation and resource appropriation is fairly common place, but an awareness of the value of such spaces for healing, renewal, and even transcendence normally heightens as a result of time spent in wilderness (Cooley, 1998). Most religions teach of the sacredness of wilderness spaces, and the healing and developmental qualities of time spent in nature (Taylor, 2008). For example, Hodgson (1982), writing of the traditional Xhosa view of God writes “No distinction can be made between sacred and secular, between natural and supernatural, for nature, man and the unseen are inseparably involved in one another
in total community” (p. 17). Despite this organised religion has been criticised by many for its role in the environmental crisis (Axelrod & Suedfeld, 1995). Such analysis stems from a dissociation between religious teachings and principles and the actual behaviour of so-called adherents. For example, “Japanese religious traditions see nature as immanently divine” (Miyamoto, 2005, p. 902). Buddhist philosophy, in particular, upholds the value of wilderness in the spiritual journey to enlightenment (Ramanathapollai, 2009). Nevertheless, every year tens of thousands of dolphins are ceremonially slaughtered by Japanese fisherman, many of whom would associate themselves with Buddhism. Similarly, many of the Western leaders preventing progress in the adoption of the Kyoto protocol would self-identify as Christian, even though the continued degradation of the environment is in contradiction to the Biblical teaching that God instituted humanity as stewards of His creation (Genesis 1:26; 1 Corinthians 4:2, KJV) and a clear warning that God will “destroy them which destroy the earth” (Revelation 11:18, KJV). Mitchell (1983) captures the transcendent, and yet visceral qualities of wildness in the following quote from a story about a prisoner who escapes a POW camp to climb a mountain:

“The mountain world is one of contrasts, of delight and disappointment, hope and despair, cynicism and faith. Climbers may celebrate their liberation and curse their lonely frailty in close order without contradiction to the larger meaning of mountaineering. These contrasts reflect upon each other and sharpen the cutting edge of perception. Sometimes the mountaineer trembles and aches and remembers the life left below" (p. 200).

For some, spiritual development as experienced in wilderness experience programmes is described as a transcendent experience, with increased awareness, and a sense of fulfilment that results in an appreciation of beauty, tranquillity and increased focus and reflection (Marsh, 2008). For others, spiritual development is tied
to specific religious identity and belief systems (Griffin, 2003). The natural beauty of nature, opportunities for solitude, and inherent physical challenges afforded on wilderness experiential programmes allow for an overwhelming feeling of connectedness, a sense of one's own insignificance, and feelings of accomplishment (Fredrickson & Anderson, 1999). These transcendent experiences are likely to be given meaning from within the individual's world-view, as well as helping to inform this world-view. Adolescent religious world-views are mainly fostered by the religious habits of their family and religious education received in school and other contexts, but not as much by indirect or channelling influences of parents and peers (Erickson, 1992). Once adopted, religiosity acts as a resource to nurture positive family functioning, well-being, self-esteem, and reduce risk taking and depression (Spilman, Neppl, Donnellan, Schofield, & Conger, 2013; Yonker, Schnabelrauch, & DeHaan, 2012).

2.6.5. Improvement in Clinical Concerns

Seeing as wilderness and adventure therapy has generated more research and outcome studies than adventure programmes targeting recreation or education, there are a number of studies describing therapeutic gains resulting from adventure programmes. Among some of the most striking include a study by Clark, Marmol, Cooley, and Gathercoal (2004) of 109 adolescents (68 male, 41 female) between the ages of 13 and 18 from 23 different treks of the Catherine Freer Wilderness Therapy Expeditions (CFWTE) programme. Clark and his colleagues used a multi-interrupted time-series design, because of the inappropriateness of random assignment, and
several instruments with proven psychometric properties. Their results suggest that wilderness therapy has statistically significant impacts on all clinical scores measured on the DSM Axes I, II and IV. Specifically, clinical syndromes (Axis I) had a mean effect size of 1.68, dysfunctional personality patterns (Axis II) an effect size of 1.22, and expressed concerns had a mean effect size of 1.39. Clark et al. (2004) point out that short-term psychotherapeutic interventions leading to significant and enduring personality changes are almost unheard of in the personality literature. Other studies have also found that wilderness therapy as an adjunct treatment can reduce the length of treatment for some personality disorders (Eikenæs, Gude, & Hoffart, 2006). Another study demonstrating the clinical effectiveness of adventure programming is Crisp and Hinch (2004), who reported statistically significant improvements on total frequency of mental health symptoms and behavioural problems ($d = 0.347$), internalising symptoms ($d = 0.113$), externalising symptoms ($d = 0.154$), depressive symptoms ($d = 0.431$, comparable to the improvement from CBT and medication over 24 weeks), and counter productive coping ($d = 0.096$ to 3 month follow up, improving to 0.29 by 2 years). Finally, Jelalian, Mehlenbeck, Lloyd-Richardson, Birmaher, and Wing (2006), using the gold standard randomised controlled experimental design, reported significantly more weight loss in a wilderness experiential programme for overweight clients than an exercise programme for the same population. Rather than looking at the research on a case-by-case basis the effectiveness of adventure programming in general is best understood by looking at meta-analyses of the existing research literature.
2.6.6. Meta-Analyses of Adventure Programming Research

Meta-analyses attempt to pool the results of a number of studies in order to form a general picture of the effectiveness of an intervention, and an understanding of the expected variability from one instance to the next. Effect sizes are generally averaged across studies, with 0.5 representing a clinically or practically significant change, whereas a size of 0.25 represents an educationally significant change (Wolf, 1986).

One of the earliest meta-analyses was conducted by Cason and Gillis (1994), who attempted to review all studies on adventure programming (including both therapeutic and non-therapeutic) with adolescent populations conducted between 1969 and 1994, totalling 99 studies. Overall they found an average effect size of 0.31 across all measured constructs, suggesting that adolescents participating in adventure programmes are 62.2% better off than those who do not. Effect sizes for measures commonly included in all adventure programmes such as self-concept and locus of control, averaged out at around 0.33. Clinical scales more likely to be used for adventure and wilderness therapy groups reported an average effect size of 1.047, suggesting that adolescents attending these programmes are more than 85% better off than adolescents who do not. Similarly, Hattie et al. (1997) conducted a meta-analysis of adventure programming studies from around the same time period as Cason and Gillis (1994), and found an overall immediate effect size for the adventure programmes of 0.34, which is akin to a 15% increase in the rate of learning, or 65% of students who participate in an adventure programme achieving better outcomes than those who do not. They found that the gains made during programmes continue to
increase over time and that the effects are maintained over a considerable time, unlike traditional educational programmes whose effects fade quickly in time. Hans (2000) conducted a meta-analyses of adventure programming outcome studies specifically focused on locus of control. She found a positive mean effect size of 0.38, with a 95% confidence interval of 0.31 to 0.45, with no significant differences in effect size across studies sampled. She emphasises that while this is statistically a moderate difference, in terms of practical significance it is quite meaningful if the change is in the direction of intended benefits of the intervention. In the same year Wilson and Lipsey (2000) published a meta-analysis of experimental studies on wilderness challenge programmes for adolescent delinquent youth, that reported an overall effect size for antisocial behaviour and delinquency scores of 0.18 (0.24 without outliers), 0.28 for interpersonal adjustment, 0.1 for locus of control, 0.31 for self-esteem, 0.25 on other measures of psychological adjustment, and 0.3 for school adjustment. Meta-analyses focused on juvenile delinquents have found an effect size of 0.5 for behaviour change and interpersonal skills, 0.54 for self-esteem and self-concept, and 0.31 for recidivism (Bedard, Rosen, & Vacha-Haase, 2003). Based on the data available at that time, Neill (2003) suggested an initial benchmark effect size of around around 0.4 for adventure therapy, but warned that the existing published data probably emerges from less than 1% of existing programs and may lack representativeness. The latest, and possibly most comprehensive meta-analyses available, conducted by Bowen and Neill (2013), focused on studies of adventure therapy programmes published between 1967 and 2012. The study represents 17,728 unique participants with a median age of 17, 62% of whom were male and 38% female. They found a moderate, positive, significant overall effect size for adventure therapy (g = 0.47), which is significantly improved
over the alternative treatments ($g = 0.14$) and no treatment groups ($g = 0.08$). However, there are large variations in the outcomes of individual studies, with the normal distribution of effect sizes ranging from approximately -0.63 to 1.4. Bowen and Neill (2013) found that behaviour categories tended to continue to improve from post-test to follow-up, academic and social development categories remained fairly stable, whereas clinical, family development, self-concept, and particularly physical outcomes tended to recede somewhat. Their meta-analysis evaluated 67 outcomes of adventure therapy programmes. When grouped into 8 categories, Bowen and Neill (2013) found significant change in all outcome categories except morality/spirituality. The effect size for each of the categories Bowen and Neill (2013) measured is represented in table 2.3 below.

Table 2.3:
Bowen and Neill's (2013) meta-analysis of adventure programming outcomes

<table>
<thead>
<tr>
<th>Outcome Category</th>
<th>$N_{Samples}$</th>
<th>$N_{ES}$</th>
<th>$g$ (V)</th>
<th>$SE$</th>
<th>$95%$ CI</th>
<th>$z$ ($p$)</th>
<th>$Q$ ($p$)</th>
<th>$I^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>61</td>
<td>132</td>
<td>.41 (.00)</td>
<td>.04</td>
<td>.33&lt;x&lt;.50</td>
<td>9.38 (.000)</td>
<td>214.61 (.000)</td>
<td>74.0</td>
</tr>
<tr>
<td>Behaviour</td>
<td>84</td>
<td>223</td>
<td>.41 (.00)</td>
<td>.05</td>
<td>.31&lt;x&lt;.51</td>
<td>8.38 (.000)</td>
<td>545.87 (.000)</td>
<td>84.8</td>
</tr>
<tr>
<td>Clinical</td>
<td>137</td>
<td>595</td>
<td>.50 (.00)</td>
<td>.04</td>
<td>.42&lt;x&lt;.59</td>
<td>11.73 (.000)</td>
<td>1,274.59 (.000)</td>
<td>89.3</td>
</tr>
<tr>
<td>Family Development</td>
<td>33</td>
<td>106</td>
<td>.36 (.01)</td>
<td>.07</td>
<td>.23&lt;x&lt;.50</td>
<td>5.26 (.000)</td>
<td>173.60 (.000)</td>
<td>81.5</td>
</tr>
<tr>
<td>Morality/Spirituality</td>
<td>9</td>
<td>12</td>
<td>.17 (.01)</td>
<td>.09</td>
<td>-.01&lt;x&lt;.35</td>
<td>1.83 (.067)</td>
<td>15.93 (.043)</td>
<td>49.7</td>
</tr>
<tr>
<td>Physical</td>
<td>13</td>
<td>21</td>
<td>.32 (.01)</td>
<td>.11</td>
<td>.10&lt;x&lt;.55</td>
<td>2.84 (.004)</td>
<td>63.60 (.000)</td>
<td>81.1</td>
</tr>
<tr>
<td>Self-Concept</td>
<td>137</td>
<td>391</td>
<td>.43 (.00)</td>
<td>.03</td>
<td>.36&lt;x&lt;.49</td>
<td>13.6 (.000)</td>
<td>513.76 (.000)</td>
<td>73.5</td>
</tr>
<tr>
<td>Social Development</td>
<td>107</td>
<td>305</td>
<td>.42 (.00)</td>
<td>.04</td>
<td>.34&lt;x&lt;.49</td>
<td>11.03 (.000)</td>
<td>502.68 (.000)</td>
<td>78.9</td>
</tr>
<tr>
<td>Total:</td>
<td>205</td>
<td>1,785</td>
<td>.47 (.00)</td>
<td>.03</td>
<td>.41&lt;x&lt;.53</td>
<td>15.11 (.000)</td>
<td>1,293.05 (.000)</td>
<td>84.2</td>
</tr>
</tbody>
</table>
2.7. **Summary of the Literature Review**

Adventure programming is an active and mature field, particularly in the United States and Australia, that went through a significant growth spurt internationally during the 1990s and early 2000s. In South Africa initial enthusiasm did not materialise into an organised, regulated, and self-promulgating industry. Instead, regulation is virtually non-existent, and programmes run mainly for profit. Nonetheless, a number of programmes do exist in South Africa, and the research literature that exists suggests that adventure programming provides a promising intervention, particularly if implemented from a positive youth development perspective within the school curriculum, for the psycho-social developmental needs of South African youth. Unfortunately, most of the robust, methodologically sound research in the field is grounded in therapeutic programmes based in a curative model addressing clinical or behavioural concerns. While the philosophical grounding of adventure programming leans towards a health promotion framework, too few of the programmes and outcomes studies focus on the development of pro-social attitudes, inculcation of values, and development of core character traits valuable for responsible citizenship as well as personal and community thriving.

Forming a definitive empirical understanding of the outcomes of adventure programmes is hampered by numerous challenges. For example, many of the studies lack rigour, and programmes vary widely in the training of their staff and the specific activities used (Cason & Gillis, 1994). Clients of therapeutic programmes tend to be significantly more externalising, have fewer mood disorders presenting than traditional therapy, will generally have been to therapy before, and have poorer family
communication and family adaptability (Jeppson, 2008). Studies do not directly measure the competence of leaders, but rely on their level of training, years of service, or education. Because research is not coordinated, most studies repeat what others have been done, and the field does not move forward or make any meaningful advances (Gillis & Thomsen, 1996). There is an incredible amount of variability in the size, length, location, activities, instruction, population, and goals of programmes (Hans, 2000). It is estimated that studies have an average power of about .65 at the two-tailed .05 level of significance for medium effect sizes, resulting in frequent failures to detect effects and lower publication rates (Hattie et al., 1997). Generally there is a lack of methodological rigour, inconsistent conceptualisations and measurements of outcome variables, and a lack of theoretical and procedural descriptions of treatment applications that make systematic reviews, and meta-analyses of available literature incredibly difficult to perform (Russell, 2003b).

Most of the available research comes from dissertations, which does not necessarily reflect the best that programmes have to offer (Gillis & Thomsen, 1996). However, between 1996 and 2001 more studies began to explore how outcomes transfer into life after the programme, there was increased use of qualitative methodologies, and an increase in the amount of research published in peer-reviewed journals as opposed to "grey" literature (Moore & Russell, 2002). Published, peer-reviewed research related to the field of adventure programming is focused primarily on discussions and reflections on the use of various interventions in adventure programming, the integration of theoretical approaches, and how these may help clients (Russell, 2004). Industry leaders have been asking researchers to employ more quantitative methods to ensure that funding is secured, address process variables, and
employ more rigorous research designs. Overall, there is evidence of various levels of methodological quality in the literature, including some very well conducted studies (Bowen & Neill, 2013).

Despite the drive for quantitative research in order to demonstrate outcomes and secure funding, there is also interest in what qualitative research can offer. Researchers acknowledge that qualitative research can provide a more detailed understanding of how programmes work (Gillis, 1992). They are able to capture the richness of experience that is not measured by statistics, but which represents the broader contextual explanations for understanding why and how change did or did not occur (Egglestonm 1998). This kind of information is valuable for improving the quality of service a programme provides. Qualitative analysis is also able to account for individual differences that are typically masked in statistical analysis of grouped measurement data (Mossman & Goldthorpe, 2004). Neill (2003) has called for "innovative, large-scale qualitative investigations which identify and seek to better understand clinically significant moments and processes which occur in adventure therapy programs" (p. 320).

There are numerous examples of qualitative studies seeking to further understanding of adventure programming processes (e.g. Botha, 2007; Dexel, 2009; Fredrickson & Anderson, 1999; Kornelson, 1996; Russell & Phillips-Miller, 2002; Russell, 2005; Sklar, 2005). Almost all of these studies utilise a basic thematic analysis in order to make meaning from the data. The present study extends the available qualitative arsenal researchers have at their disposal by demonstrating how phenomenography can be used to better understand the different ways in which adventure programmes can be experienced, and elucidate the critical aspects of such
programmes that contribute to change. In the next chapter the conceptual and theoretical perspectives that underpin this approach are described.
CHAPTER 3:
THEORETICAL FRAMEWORK

3.1. Introduction

This study brings together concepts and theoretical approaches from adventure programming, higher education, psychology, and positive youth development. In order to explain and motivate the conceptual interchange between these fields, this chapter introduces core concepts and theories from the various fields, and explains their alignment and interchange within the present study. The chapter begins with a description of the developmental dynamics of adolescence – the age cohort within which the study sample falls. Psychological growth and change, the intended outcomes of the studied intervention, are then discussed with particular reference to their application through the modality of adventure programming. Finally, phenomenography and variation theory, as well as their ontological and epistemological basis, are explained and used as an alternative framework for describing the kinds of psychological growth, development, or change that can take place within the adventure programme studied.

3.2. Development and Change among Adolescents

South Africa has a relatively youthful population, with half of the population falling below the age of 25 (Statistics South Africa, 2012). Being young in South Africa brings with it the pressures of racial economic disparity (van der Berg, 2011), high rates of HIV/AIDS infection (Wilson, Wright, Safrit, & Rudy, 2010), concerning social norms regarding intimate relationships (Flisher, Myer, Marais, Reddy, & Lombard, 2007), availability and abuse of substances (Plüddemann, Myers, & Parry, 2008), high levels of perceived crime and violence (Statistics South
Africa, 2012), and an ailing educational system (Department of Basic Education, 2012). At the same time there is evidence that positive factors such as religiosity (Spilman, Neppl, Donnellan, Schofield, & Conger, 2013), optimism (Orejudo, Puyuelo, Fernández-Turrado, & Ramos, 2012), and school-based life skills programmes (Graves, Sentner, Workman, & Mackey, 2011) can foster healthy development, adjustment and positive family functioning. Ways in which these factors can be understood and managed are described below.

3.2.1 Adolescence as a Period of Developmental Change

Adolescence is a phase of life best characterised not by age, but by a quality of experience, which is a product of a historically-, culturally-, and socially-constructed transition beginning in biology, with its associated pubertal changes, and ending in society, with the identity of young adult and the enactment of role choices forged during adolescence (Ingold, 2008; Learner, 2005; Mufune, 1999). Adolescence is characterised by significant and salient developmental changes, more so than any other stage of development except for infancy. A wealth of literature exists describing the biological, perceptual, motor, cognitive, personality, affective, social, cultural, spiritual and religious development that takes place during adolescence (Blakemore, 2008; Fowler & Dell, 2006; Holmbeck et al., 2003; Ingold, 2008; Kafaar, Swartz, Kagee, Lesch, & Jaspan, 2007; Learner, 2005; Luna, Garver, Urban, Lazar, & Sweeney, 2004; Moshman, 1998; Piaget, 1969; Weisz & Hawley, 2002). These developmental changes are a function of both the individual and context, involving the mutual interaction among biological, interpersonal and social processes (e.g. Blakemore, 2008; Luna et al., 2004; Schore & Schore, 2008). These changes present an enormous opportunity, but also heightened risk for dysfunction in many forms (Learner, 2005; Weisz & Hawley, 2002).
3.2.2. Traditional Approaches to Psychological Change among Adolescents

Traditionally, theorists almost exclusively defined adolescence as a time of normative developmental disturbance, a time of “storm and stress”, originating with Granville Stanley Hall's (1904) notion that ontogeny recapitulates phylogeny. This deficit orientation prescribes a view of adolescents as dangerous and endangered, problems that need to be managed. To address the number of mental health concerns that may assail adolescents, empirically supported treatments for use with adolescent clients have been developed (Kazdin, 1997; Kazdin & Wassell, 1999; Weisz & Hawley, 2002). Over 70% of such treatments are learning-based, with cognitive-behavioural treatments (CBT) seemingly the most researched and most used (Clarke, DeBar, & Lewinsohn, 2003; Kazdin, 2003; Kendall & Choudhury, 2003; Rosenfeld, 2009). Despite the apparent success in identifying empirically based treatments, caution needs to be exercised in the sense that such studies are rife with methodological problems, biases, and the influence of political and economic forces. In addition to research design and application issues, psychologists recognise a number of challenges to conducting therapeutic interventions with adolescent populations (Kazdin, 1997, 2003; Kazdin & Nock, 2003; Kazdin & Wassell, 1999; Kendall & Choudhury, 2003; Nock & Ferriter, 2005; Rosenfeld, 2009; Shirk, 2001). In South Africa, such treatments are seldom accessible, appropriate or relevant to the socio-political context of those who need them most (Naidoo, 1996, 2000). Despite recommendations on how treatments can be made more relevant and accessible, incorporation of mental health treatment into the primary health care systems falls far from the ideal (Ahmed & Pretorius-Heuchert, 2001; Mkize & Kometsi, 2008). The burden of care is simply too great and the number of practising community-based therapists too few to maintain a treatment based outlook (Seedat et al., 2009).
3.2.3. The Positive Youth Development Approach

The principal founders of psychology, like William James, espoused admirable goals for psychology in discovering causal principles of human behaviour that could be wielded to make the lives of all people more fulfilling (Kelly, 2003). This focus was diverted after the second world war when the National Institute of Mental Health was established offering lucrative grants for research into mental dysfunction. However, in the last two decades there has been a re-visioning of psychology, with theorists calling for psychology to reduce its emphasis on dysfunction, and rekindle its neglected missions of making normal people stronger and more productive, and making high human potential actual (e.g. Carr, 2004; Keyes & Haidt, 2003; Linley & Joseph, 2004). Various developmental scientists have applied this orientation to the field of adolescent development under the banner of positive youth development (PYD). PYD provides a philosophy, developmental perspective, and programming framework that has particular relevance for therapeutic work with adolescents (Duerden, Widmer, & Witt, 2010). Positive youth development aims to apply research and practice to ensure each child has the opportunity to experience more positive affect than negative affect, to be satisfied with their life as it has been lived, to identify their talents and strengths and use these in a variety of fulfilling pursuits, and to become a contributing member of a social community (Peterson, 2004). This approach is reflected in the South African draft policy guidelines for adolescent and youth care, which suggests that mental health services for adolescents and youth must be located squarely in a health promotion framework (Mhlange, Maringa, Motlatla, & Flisher, 1999 cited in Flisher, Fisher, & Subedar, 1999). In order to promote well-being interventions should focus on prevention, address both individual and environmental factors, encourage participation in social action, and focus on developing positive psychological and political forces (Evans & Prilleltensky, 2007; Morsillo & Prilleltensky, 2007; Prilleltensky & Fox, 2007). The positive youth development perspective has made great advances into developing and
testing models aimed at guiding adolescents towards thriving youth (Learner, 2005). These programmes engage adolescents in positive affirming experiences and relationships with peers and supportive adults, designed to foster developmental assets, including responsibility, service and expectations (Benson, 1997). The goals of PYD programmes can be summarised as: competence, confidence, connection, caring, character, and contribution (Nicholson, Collins & Homer, 2004; Roth & Brooks-Gunn, 2003).

Schools provide an optimal context for positive youth development programmes. Larson (2000) points out that adolescents spend between 25 to 30% of their time in school. Schools characteristically provide an intellectually stimulating and challenging environment, but limited use is being made of this context for experiencing elements of initiative and positive development. Schools are seen by South Africans as playing an important role in the socialisation of youth, particularly the transmission of values, and interventions conducted in schools are also significantly more cost-effective and sustainable (Coetzer, 2007; Cortina et al., 2008; Richter et al., 2009). Recognising the great potential of schools for positive youth development, the Collaborative for Academic Social and Emotional Learning (CASEL, 2003) suggests five teachable competencies that provide a foundation for effective development in school-based programmes: self-awareness, social-awareness, self-management, relationship skills and responsible decision making.

### 3.2.4. Adventure Programming as an Alternative

One of the ways in which PYD can be brought into schools is the use of adventure programming. Sibthorpe and Morgan (2011) suggest that adventure programmes are prototypes of how PYD programmes should function. Most of the activities involved in these programmes are intrinsically interesting to many youth, while the mechanics of wilderness experience uniquely position adventure-based programmes to supply an abundance of experiences that are authentically
goal relevant, engaging, and challenging to participants. “Adventure programs excel at providing opportunities for youth to engage in healthy relationship building, feel acceptance, and develop socioemotional competence—assets that are particularly powerful in promoting positive outcomes and disrupting negative outcomes” (Sibthorpe & Morgan, 2011, p. 116). Chapter two presented a broad overview on the theory and outcomes research relating to adventure programming. Based on this review it is clear that therapeutic programmes have generated the most research, and appear to have the highest efficiency. This is most likely because they tailor programme components and processes directly to client needs (Bandoroff & Newes, 2004; Gass, 1993b). Adventure programmes operating within a PYD framework could attain similar levels of effectiveness if they to select and sequence activities most likely to foster identified developmental goals such as self-management, competence, caring and so forth. As is the case with over 70% of therapeutic interventions used with adolescence, adventure programming is largely learning-based, with experiential learning theory being a prominent conceptual juncture for almost all adventure programming interventions (Priest & Gass, 2005; Rosenfeld, 2009). Experiential learning involves facilitation of the creation and transfer of abstract principles, values, attitudes and understandings from concrete experience, which are retained and may be applied and influence future experience and behaviour (Jarvis, Holford, & Griffin, 1998). If we understand the therapeutic or developmental growth taking place in PYD adventure programmes as learning, then it is logical that adopting an educational or pedagogical approach to research on such programmes could be useful.

3.3. Phenomenography as a Methodology for Understanding Learning

Constructivist, cognitive perspectives of learning propose that learning takes place through the process of conceptual change, when mental representations of a phenomenon are replaced by new mental representations constructed on the basis of a person's experience (Åkerlind, 2008). The
models used to describe such learning are largely process models, such as the experiential-learning models used to explain development in adventure programming (Kolb, 1984; Neill, 2004). Phenomenography, an analytical approach to studying the different ways in which people conceptualise phenomena in their world, and its theoretical offshoot, variation theory, provide an alternative, complementary approach to understanding learning based on conceptions of content rather than learning processes.

Phenomenography was established by Ference Marton and his colleagues in the Department of Education at the University of Göteborg in Sweden (Marton, 1981, 1986). They wanted to develop an empirical qualitative approach to address the perceived limitations of the dominant quantitative approaches to studying teaching and learning, particularly the tendency to develop explanations of student learning from the educator's perspective (Marton, 2000; Sandberg, 1997). Marton (1986) defined phenomenography as “a research method adapted for mapping the qualitatively different ways in which people experience, conceptualise, perceive, and understand various aspects of, and phenomena in, the world around them” (p. 31). A poetic rendition by Cherry (2005) describes phenomenography as “one way of helping to surface and consider the meta-themes that – while not the true story of any one of us – at some level help to define the story of all of us” (p. 62). Phenomenography provides an empirical or research-based approach to faculty development that considers both content and context in describing the functional relationships between people's intentional actions when engaging in learning activities, and the nature of the understanding they end up with (Entwistle, 1997a; Richardson, 1999). There are three main lines of phenomenographic research: (a) content-related studies of more general aspects of learning in which the qualitatively different ways content are understood are consistently related to differences in the approach to learning adopted by learners, (b) mapping students' understandings of concepts within particular content domains, and (c) studies driven by a knowledge interest to describe how people conceive of different aspects of their reality (Marton, 1988). Phenomenographers place
emphasis on the what of learning. They are interested in the content of learning, rather than the processes involved (Marton & Booth, 1997). This distinguishes the phenomenographic approach from the general information processing approach in cognitive psychology that focuses on the how of learning – how information processes act on knowledge to facilitate or impede encoding or retrieval, or how knowledge is structured and stored in memory (e.g. O'Donnell, Dansereau, & Hall, 2002; Roediger, 2008; Schacter, 1996). A focus on content also contrasts with the Vygotskian social constructionist perspective that places prime importance on the context of learning (Prosser & Trigwell, 1997). The processes used in learning, and the content that is learned are inextricably related, they are two aspects of a single phenomenon that are internally related (Dall'Alba, 2000). Ultimately, it is the content of learning, an individual's interpretation of the situations that they find themselves in, that contributes to an individual's mode of experiencing, belief, attitude, and ultimately behaviour (Marton, 1981, Säljö, 1988). Marton and Booth (1997) emphasise “you cannot act other than in relation to the world as you experience it” (p. 111). Phenomenography aims to describe the different ways in which a phenomenon can be understood, and the relationships between distinct conceptions, in the form of an outcome space. Phenomenographers are interested in how perceptions and experiences are dynamically shaped by the behaviours of others, the context in which phenomena are experienced, the intentions and motivation of the learner, and the previous knowledge and expectations individuals bring with them (Cousin, 2009; Prosser, 2000). Phenomenographic research is underpinned by the belief that “the more faithful we, as researchers, can be to individuals' conceptions of an aspect of reality, the better we are able to understand learning, teaching, and other kinds of human actions in society” (Sandberg, 1997, p. 204). In the next sections, the ontological and epistemological frameworks of phenomenography are explained, allowing for a better understanding of what phenomenographers mean by conceptions and how these can be understood.
3.3.1. The Ontological and Epistemological Stance of Phenomenography

The ontological and epistemological assumptions of quantitative approaches to research tend to remain implicit, whereas qualitative studies tend to address the ontological and epistemological bases of their own research practices in a more reflexive and critical manner (Richardson, 1999). This is partly because the concourse of epistemological approaches within the qualitative camp necessitates that each study engages in some clarification. Thompson and Harper (2012) suggest that improvement in the quality of qualitative research “is best achieved by greater attention being paid to epistemological issues rather than to method per se” (p. 5). In this section a broad ontological and epistemological framework for this study is described. Ontology can be crudely defined as the study of the nature of reality and of the human being in the world; it is concerned with how our realities are constituted and subsequently what there is to know in the world 'out there'. Epistemology, on the other hand, can be defined as the study of the nature of knowledge; it is concerned with what it is possible for us to know and how we can come to know it.

A number of ontological positions have been postulated in the history of psychology. For example, Victor Frankl (1967) suggested that reality is comprised of three dimensions, namely the *soma* (our physical body), *psyche* (our cognitions and emotions), and the *noëtic* (the uniquely human soul). A phenomenological ontology presents a dualistic view of reality, making a distinction between a *noumenon*, a thing in itself, and a *phenomenon*, a thing as it has appeared (Richardson, 1999). Phenomenography focuses on the consciousness of experience, the individual's lifeworld, which is a subtle construction that is both socially and experientially based, as well as local and specific (Lawthom & Tindall, 2011; Usher, 1993). Slife (2004) differentiated between abstractionism, which assumes that theories, principles and practices within psychology capture and embody the fundamental level of being and reality; and a relational ontology, in which all things have a shared being and mutual constitution - their nature stems not only from what is inside or
intrinsic, but depends on their relation to other entities. Such ontological arguments cannot be tested empirically, they must be evaluated based on “logical coherence, conceptual clarity, heuristic power, empirical fruitfulness, normative stake, or sociocultural significance” (Radder, 1997, p. 651). Phenomenography is grounded in a relational ontology of non-dualism (Marton, 1981, 1986; Marton & Booth, 1997). Phenomenography suggests that our realities are constituted of conceptions, the understandings we form of our experiences. Marton (2000) describes the position as follows:

“From a non-dualistic ontological perspective there are not two worlds: a real, objective world, on the one hand, and a subjective world of mental representations, on the other. There is only one world, a really existing world, which is experienced and understood in different ways by human beings. It is simultaneously objective and subjective. An experience is a relationship between object and subject, encompassing both. The experience is as much an aspect of the object as it is of the subject” (p. 105).

The non-dualist stance declares that our constructions of the world, which constitute the world we know and in which we live, are composed of an internal relationship between the objective (outside physical reality) and subjective (meanings and internal mental acts), resulting in a single experienced reality (Marton & Booth, 1997). Criticisms of a non-dualist ontology suggest that a necessary consequence of non-dualism is that objects and events exist only insofar as they are experienced (Richardson, 1999). One solution to this problem was to posit the existence of an omniscient God who perceived all objects, ensuring their continued existence (Berkeley, 1734). However, a non-dualist ontology of conceptions, the representations of concepts and experiences studied in phenomenography, need not discount the possibility of an objective physical reality or a subjective reality of mental acts and representations. At least conceptions and knowledge, those entities that are reflected upon and communicated to researchers, are non-dualistic. Phenomenography embraces a holistic ontology, which conceives of entities as being definable only in their mutual relation. This is contrasted to atomistic ontologies, in which entities are defined
independently, and then their relationships are considered (Ekeblad & Bond, 1994). The non-dualist ontology of phenomenography “remains at the level of an accepted ideological assumption, and its ontological status continues to undergo further development and explanation” (Barnard, McCosker, & Gerber, 1999, p. 217). The holistic, relational notion of conceptions comprising the relationship between a physical reality, and a subjective or psychic reality, could be extended to include elements such as social, political, and environmental contexts, and the relation between the individual and cultural norms or accepted discourses that shape his or her world.

Ontology is directly related to epistemology, what there is in the world to know inevitably influences how we can know these things. There are three main epistemological approaches within qualitative research that can be seen to form a continuum, and within each of these broad categories there exist sub-groupings with significant epistemological variations (Harper, 2012): (a) **realism** is based on the assumption that research can generate valid, reliable and generalisable accounts of phenomena in the world which exist independently of the researcher's awareness of them, and includes two main subsidiary approaches being direct realism (positivism), and critical realism (post-positivism); (b) **phenomenology** is concerned with understanding phenomena from the perspective of the individual, acknowledging that this is a subjective description while assuming that there is some correspondence between their description and their subjective experience, and includes subcategories of descriptive phenomenology and interpretive phenomenology; and (c) **social constructionism** is less interested with phenomena than with how understandings of phenomena are constructed, and mediated through language and discourse to serve a range of interpersonal, cultural and political functions, rather than reflections of their thoughts or experiences. There are two main versions of social constructivism, radical social constructionism and moderate, or critical realist social constructionism (Harper, 2012).

The epistemological position of phenomenography touches on each of these positions. It states that latent conceptions of reality, which are intentionally constituted through experience and
the awareness of critical aspects of a phenomenon, can be brought into a reflected or thematised
state through the process of communication in the research interview (Marton, 1994; Marton &
Booth, 1997). The meanings individuals form are relational and intentional, they arise out of and are
constructed by experience within a specific situation or context (Ekeblad & Bond, 1994). Conceptions are also holistic, their structure and meaning cannot develop separately, but do so
simultaneously (Svennson, 1997). The nature of the meaning formed when an individual interacts
with a phenomenon is based on which aspects are figural in awareness, and which are tacit and have
receded into the background (Marton & Booth, 1997). In so far as two different individuals will
focus on different aspects of a phenomenon, they will experience the phenomenon in different
ways, and will describe the phenomenon in different ways (Marton, 1986). But there are a limited
number of ways in which people can experience a phenomenon (Marton & Booth, 1997). On the
other hand, one can strive to ensure that individuals attain a similar conception by guiding them to
discern variation in specific critical features of a phenomenon (Lo, 2012). Many of the assumptions
supporting these epistemological assumptions were derived from empirical findings supporting
these views, rather than originating in specific existing philosophical assumptions (Marton, 1986).
Richardson (1999) argues that the entities that are created during interactions between
phenomenographic researchers and participants have no independent existence, they are merely
discursive practices. Similarly, Säljö (1997) suggests that a more appropriate epistemological
position for phenomenography is to interpret the conceptions of reality communicated by
individuals as accounting practices from the perspective of social constructionism. Phenomenography differs from social constructivist epistemology in that it places emphasis “on
learning content, coming to see important knowledge in particular ways and how to contextualise
them, and not at all on learning social structures that have formed around knowledge and how to
manoeuvre in them” (Booth, 2008, p. 451). A dialectical approach is to recognise that individuals do
form latent conceptions of their experiences, that phenomenography is oriented to the empiricist
goal of eliciting and describing these conceptions, but that the categories of description produced are always the researcher's interpretation of the participant's conceptions of reality as communicated to the researcher during data generation (Sandberg, 1997). The participant's formation of conceptions, and the categories of descriptions derived during the study, are influenced by the phenomenon, the life-world of the individual, and aspects of the socio-cultural-political milieu in which the respondent finds themselves. Such an approach to build bridges between major epistemological perspectives mirrors the work of theorists such as Anthony Giddens, Pierre Bourdieu, and Habermas (May, 2011). Figure 3.1 below illustrates the focus of research being the relationship between the phenomenon and subject, while backgrounding the influence of social discourses and the researcher's own relationship with the phenomenon under investigation. The phenomenon, as is, could be described as the combined relations of all the entities represented in the diagram, whereas the categories of description produced in phenomenography aims to highlight the relation between the phenomenon and the research subjects. Researchers must be reflexive about how meanings are influenced by social contexts, and the negotiation of meanings within the research context. The relationship between the subjects and the phenomenon is the object of the study, and must retain focus, whereas the relationship between the researcher and subjects and the researcher and the phenomenon must be managed to ensure that aim of the research is not derailed (Bowden, 2005).

Figure 3.1: Relationality of entities in a phenomenographic epistemology
3.3.2 Developments in the use of Phenomenography

Marton (1986) believed that “a careful account of the different ways people think about phenomena may help uncover conditions that facilitate the transition from one way of thinking to a qualitatively 'better' perception of reality” (p. 33). In this way phenomenography can provide developmental psychologists and researchers interested in the psychology of learning with a framework for describing and facilitating targeted changes in understanding, and thereby, action and being. Phenomenography provides researchers and practitioners with a model of learning that defines learning, development or change as “coming to discern phenomena in new and more powerful ways” (Collier-Reed, Ingerman, & Berglund, 2009, p. 340). While phenomenography provides researchers with a method to discover variations in understanding, variation theory developed out of this research to explain why learning does or does not take place within a specific context. It provides an alternative, but compatible, explanatory framework to traditional factors like intelligence and an authentic environment. Variation theory suggests that variation of critical features of a phenomenon in focal awareness could be used to bring about discernment of a range of understandings targeted by educators (Lo, 2012; Marton & Booth, 1997; Marton & Tsui, 2004).

Marton and Booth (1997) demonstrated that phenomena are perceived or understood in a limited number of qualitatively different ways. The way something is understood or experienced is contingent on the aspects discerned that are attended to simultaneously (Marton, Runesson, & Tsui, 2004). “If we wish to help students [or programme participants] to develop powerful ways of acting, we must first help them to develop powerful ways of seeing” (Lo, 2012, p. 23). According to variation theory, critical aspects of a phenomenon are discerned only when we experience variation in those features of the phenomenon. It is also discernment of how the whole relates to the context that allows discernment of critical parts of the whole. A central thesis of variation theory is that “the pattern of variation inherent in the learning situation is fundamental to the development of certain
capabilities” (Marton et al, 2004, p. 15). There are four main patterns of variation that have been identified and can be used to bring about conceptual expansion: (a) contrast - the phenomenon is contrasted with a carefully chosen comparator in order to draw attention to selected aspects of the phenomenon more than others; (b) generalisation - subjects are exposed to varying instances of the same phenomenon in order to become aware of alternative ways of experiencing the phenomenon, and to separate essential from irrelevant features of the phenomenon; (c) separation - in order to experience particular features of a phenomenon, subjects need to experience variation in these features, while other features remain invariant; and (d) fusion - to attend and perceive the holistic interplay of all essential features of a phenomenon, the subject must experience the phenomena in terms of a set of aspects that are analytically separated but simultaneously experienced, called synchronic simultaneity (Åkerlind, 2008; Marton & Pang, 2006; Marton et al., 2004). Central to the conceptualisation of variation and discernment is the psychological concept of awareness. Marton et al. (2004) use this term as a synonym to consciousness. Seeing as we can only focus on a limited number of features of a phenomenon at any one time, some aspects of the phenomenon will be figural or thematised, whereas other aspects are tacit and not in direct awareness (Marton & Booth, 1997). The conceptualisation of awareness used in variation theory was borrowed and adapted from Aron Gurwitsch (1964), who used Gestalt psychology principles to formulate a theory of consciousness to be used in transcendental Husserlian phenomenology (Marcelle, 2010). Gurwitsch (1964) suggested that awareness is composed of three elements, which are constituted simultaneously but are also dynamic. These include (a) the theme, which is the object of focal awareness; (b) the thematic field, which includes all aspects of the world that are related to the theme, and in which it is embedded; and (c) all the other aspects of long-term memory and consciousness that coexist with the theme without at that moment having any relation to it (Lo, 2012). Specific aspects that are not in focal awareness but in the thematic field are influential – we do not experience a phenomenon as independent parts, but experience the phenomenon as a whole
of which the focused-on parts are merely parts. The influence of unattended stimuli and aspects of experience on perception and learning has been suitably demonstrated in priming and facial recognition research (e.g., Kounios & Beeman, 2009; Lewicki, Czyzewska, & Hoffman, 1987; Tranel & Damasio, 1985; Ullman, 2007). Marton and Booth (1997) refer to these important but unfocused aspects brought into awareness as the external horizon. The term internal horizon is used to refer to the critical features of a phenomenon, and their relationships to each other and the whole. As a consequence of the nature of awareness, our conceptions of phenomena, which are formed based on the aspects we focus on, and those in the external horizon, are always partial. As different people at different times focus on different aspects, they are left with different ways in which they conceptualise such objects (Marton & Booth, 1997). If people are to have a similar perception of a phenomenon, they must focus on the same set of 'critical features' that are binding to a certain perception of the phenomenon (Lo, 2012). From this perspective, development takes place when a programme participant is “capable of being simultaneously and focally aware of other aspects or more aspects of a phenomenon than was previously the case” (Marton & Booth, 1997, p. 142). Similarly, “to fully understand an object of learning, one must discern all of the critical features and their relationships simultaneously” (Lo, 2012, p. 28). Ingerman, Linder, and Marshall (2009) suggest that development of the capacity to see a phenomenon in a new way involves two main stages: (a) being exposed to one or more dimensions of variation, and discerning variation with respect to one or several aspects of the phenomenon; and (b) recognising the essence or structure of this variation, and experiencing it as holistically relevant to the present context, but also recognising the phenomenon in a way that over-arches a number of contexts. Ingerman et al. (2009) call the episodic sequence of learning activities where students go through these two stages a thread of learning. They further distinguish experienced variation in a phenomenon as being either variation within an aspect, or variation across aspects requiring the learner to discern several aspects simultaneously. Their research has highlighted that the temporal dynamic in the path to learning
must also be considered, and that the context in which aspects of the phenomenon vary, may have a significant impact on learning. Empirical research has supported the contention that purposefully and systematically varying certain aspects of a phenomenon and keeping other aspects constant, creates greater potential for discernment of aspects previously unattended to, leading to new ways of experiencing or understanding a phenomenon (Lo, 2012; Marton & Tsui, 2004).

Contemporary use of phenomenography and variation theory takes place almost exclusively in formal educational contexts (Dall'Alba, 2000; Lo, 2012; Marton & Tsui, 2006). Phenomenography has been used to study conceptions of teaching and learning (e.g. Åkerlind, 2008; González, 2011; Trigwell & Prosser, 1997), the process of learning (Booth, 1997; Ingerman, Linder, & Marshall, 2009) and conceptions of academic material (e.g. Hales & Watkins, 2004; Pang, 2010; Tóth & Ludányi, 2007). However, phenomenography can just as well be applied to “understanding of general issues in society unrelated to educational systems” (Bowden, 2000, p. 1). Over the last two decades phenomenography has been increasingly used within the health care context, particularly in nursing, to develop improved understandings of patients' perceptions of relevant phenomena, thereby improving patient communication, health care, health maintenance, clinical practice, theory and education (Barnard, McCosker, & Gerber, 1999; Stenfors-Hayes, Hult, & Dahlgren, 2013). McCosker, Barnard, and Gerber (2004) argued that effective societal responses to socially relevant experiences require that health professionals are informed and understand the nature of the phenomenon from the perspective of those experiencing it. Health care researchers argue that understanding the different ways in which people experience treatment, health, illness and coping can lead to identification of different strategies to make healthcare more effective, inclusive and ethical (Le Lievre, Schweitzer, & Barnard, 2011; Skärsätera, Dencker, Häggström, & Fridlund, 2003; Wirihana & Barnard, 2012). Hales and Watkins (2004) suggest that phenomenography has advantages over phenomenology and grounded theory in that it allows paths for development and change to be mapped, provides an explanation of agency within an
experiential setting, and makes it possible to address the position of learners and their learning process. Its strength lies not only in providing a methodology, but also an alternative perspective on learning. In this study the utility of phenomenography in describing clients' varying experiences of a psychological interventions at large, and adventure programming in particular, are demonstrated.

3.4. Qualitative Discovery of Mechanisms of Change

Therapeutic interventions, whether oriented in a treatment or youth development framework, must consider how therapeutic change is achieved (Kazdin & Nock, 2003). In the literature review mechanisms of change identified in adolescent psychotherapy and adventure programming, as well as their alignment, have been discussed (Gass, 1993; Newes & Bandoroff, 2004; Priest & Gass, 2005; Rosenfeld, 2009; Russell & Phillips-Miller, 2002; Wichmann, 1993). Despite the advances made thus far in delineating these factors, Elliott (2012) suggests that “we still know relatively little about how change actually occurs in most mental health interventions, making qualitative discovery-orientated methods especially appropriative” (p. 69). While qualitative methods are being increasingly used to this end, the range of strategies implemented is largely restricted to variations of grounded theory or interpretive phenomenological analysis (IPA). In addition, these qualitative approaches mainly tackle change by looking for factors deemed helpful, looking for sequential processes involved with change, and forming descriptions of significant episodes of therapeutic change (Elliott, 2012).

3.5. Summary

Phenomenography is a research approach that has been developed specifically to study the various ways in which people can experience a phenomenon, map the hierarchical relationships
between such conceptions, and develop interventions aimed to vary discernment of critical features of the phenomenon in order to advance development. Although mainly used in regard to academic phenomena, phenomenography has been used in health care research. The present study demonstrates an innovative approach to studying psychological intervention outcomes and mechanisms of change, using a phenomenographical analysis of the descriptions of a sample of adolescents of their conceptions of a wilderness-based adventure programme. From the perspective of phenomenography, psychological development is re-conceptualised as a change in conceptions of self, others, and interdependent relationships in the world, and linked to critical aspects in the awareness of participants' descriptions of the programme.
CHAPTER 4:

QUALITATIVE METHODOLOGICAL PARADIGM

4.1. Introduction

In this chapter the core methodological components of the study are described, motivated, and evaluated. The discussion begins with a description of the broad research paradigm the study falls into (qualitative methodology), followed by theoretical assumptions particular to the study, before delving into the specific research design used (phenomenography) and the more practical aspects of method such as data generation, sampling, and analysis. The chapter concludes with a brief overview of the ethical concerns noted in psychological research, and how these were addressed in the present study.

Research methods in psychology can be divided into two broad methodological approaches, underpinned by contrasting world-views, and applied towards different epistemic, pragmatic, or transformatory goals. Quantitative methodology, based in a positivist/empiricist world-view, places emphasis on explaining and predicting reality through the quantification of constructs, conceptualising reality in the form of variables and their inter-relationships, and the control of error through research design and complex statistical analyses. Qualitative methodology, based in a constructivist/phenomenological world-view, emphasises describing or understanding reality from an emic (actors or insiders) perspective, understanding phenomena holistically, and using methods that allow for the researcher to 'stay close' to the phenomenon under investigation (Babbie & Mouton, 2001). This study is grounded within a qualitative approach to research. In the 1970s and 1980s qualitative and quantitative scholars engaged in an academic 'paradigm war' for scientific legitimacy (Tashakkori & Teddlie, 1998; Tesch, 1990). It was only following this struggle, and during the subsequent rise of mixed-methods approaches in the 1990s, that qualitative methods
started making inroads into mainstream psychology research practice (Creswell, 2003). Camic, 
Rhodes, and Yardley (2003) criticised psychologists for a tendency to privilege quantitative 
methodologies despite qualitatively oriented research concerns, which has constrained our full 
understanding of psychological processes. Although some prejudice (and misunderstanding) still 
exists in a field dominated by post-positivist thinking, qualitative methods are now firmly accepted 
in the mainstream of psychology across the globe (Frost, 2011b). However, bastions vaunting 
qualitative, quantitative, or more pragmatic mixed approaches continue to exist in different 
substantive fields and psychology departments at different universities.

For this reason it is incumbent on the researcher to motivate their choice of methodological 
approach for their field and their particular research context. Qualitative methods have a long 
history of influence within the discipline of psychology. Detailed ideographic qualitative case 
studies played a significant role in the development of psychotherapeutic approaches such as 
In addition, prominent psychologists such as Abraham Maslow and Amadeo Giorgi have played an 
important role in advancing qualitative approaches (Tesch, 1990). In South Africa it appears as 
though qualitative methods are a well-established research paradigm in the social sciences. For 
example, in the last complete volume of the South African Journal of Psychology (vol. 42), just 
over half of the empirical papers published utilised qualitative methods.

Ultimately, the central concern guiding the choice of research methodology should always 
be the research question, which itself is driven by the need for information that is contextually 
relevant and useful. Within the field of adventure programming researchers have been calling for 
innovative, large-scale qualitative investigations that can generate an understanding the clinically 
significant moments and processes that explain the variance in the outcomes demonstrated using 
robust, longitudinal, multivariate, evaluative quantitative research (Kendall & Choudhury, 2003; 
Neill, 2003; Newes, 2001; Russell, 2004). Such research needs to take into account the complexity
of the adventure programming context, and allow inductive theory generation from an emic perspective. Van der Hoorn (1994) describes this as the opportunity for academics and researchers, generally grounded in the realities and theory-laden descriptions of ivory tower specialists, to see and understand the world through the eyes and voices of the 'everyday people' who utilise their services. Qualitative methods allow for closer one-on-one interaction with programme participants, investigation of complex phenomena not easily reduced to a limited number of quantitative variables, and observation of behaviour in its naturally occurring context (Elliott, 2012; Harper & Thompson, 2012; Khran & Patnum, 2003). Qualitative approaches are thus seen as appropriate to the kind of question being asked in this study – developing an understanding of how people experience and interpret an adventure programme. Qualitative methods are favoured for achieving the aims of the present study for the following reasons: (a) qualitative research is particularly well suited to developing understandings of complex phenomena, such as the adventure programme in this study (Elliott, 2012); (b) Qualitative methods provide insights of the phenomenon based on the authentic understandings and descriptions of the participants themselves, rather than trying to pigeon-hole their experiences into predefined (and sometimes ill-defined) theoretical conceptions; (c) psychologists generally make for good qualitative researchers as many of the core competencies necessary for work as a mental health practitioner are highly transferable to qualitative research practice (Thompson & Chambers, 2012); and (d) the qualitative approach used in this study has proven very useful for facilitating improvement in practice within the field of education (Lo, 2012; Marton & Tsui, 2006). Seeing as adventure programming can be broadly categorised as an experiential learning-based intervention, it is expected that methodological utility is transferable to the context of this research.

Tesch (1990) suggests at least 13 different qualitative approaches used in psychology. These can be broken down into two broad approaches, 'big q' and 'little q' methods (Thompson & Harper, 2012; Willig, 2008). Qualitative research defined as 'little q' places emphasis on qualitative data
collection, where non-numerical data are used within a hypothetico-deductive research design. Such research assumes direct correspondence between what is observed and the nature of reality, and is characterised by the imposition of the researcher's meanings during data collection and analysis (Willig, 2008). 'Big q' research, on the other hand, acknowledges the inter-subjective relationship between the researcher and the phenomena under investigation, placing emphasis on qualitative data analysis, and is performed in a more inductive, open-ended, and reflexive fashion considering both epistemological and personal reflexivity (Thompson & Harper, 2012). This study follows a 'big-q' approach to qualitative research.

4.2. Qualitative Design used in the Study: Phenomenography

In this section the qualitative design used in this study, phenomenography, is positioned within the aggregation of qualitative research popular in psychology and described in detail. The most commonly used qualitative designs in psychology research include IPA, grounded theory, ethnography, discourse analysis, narrative analysis and case studies (Khran & Putnam, 2003; Willig, 2008; Frost, 2011a). I am not aware of any other study within the field of psychology that has used phenomenography as a research design to study a therapeutic intervention. In this sense this study is advancing new methodological ground, and will endeavour to clearly articulate the options and choices taken. Prominent phenomenological scholars, such as Ference Marton (personal communication, August 17, 2010), Mike Watkins (personal communication, August 13, 2010), and Noel Entwistle (personal communication, August 11, 2010) have communicated that phenomenography could be used to study the effects of adventure therapy by analysing participants' accounts of shared experiences in terms of qualitatively different ways in which they make sense of the experience.

The process of categorising qualitative research designs, or methodological currents of
thought as they have been called, is fairly complex due to the vast number of approaches and the varied ways in which they could be grouped. Marshall and Rossman (2011) differentiate three main genres in qualitative research: (a) a focus on society and culture, as exemplified in ethnography and action research; (b) a focus on individual lived experience, as demonstrated in phenomenological research and life histories, and (c) a focus on text and communication, as demonstrated in sociolinguistic research and discourse analysis. Phenomenography fits into the genre focusing on individual lived experience. Merriam (2009) differentiates between interpretive, critical and post-modern or post-structural approaches. This study falls into her interpretive category, which are aimed at describing the meaning people's experiences of their social world has for them, in a particular context at a particular point in time. Tesch (1990), who identified 45 qualitative designs, used the following teleological categories in her classification: (a) characteristics of language, (b) discovery of regularities, (c) comprehension of meaning, and (d) reflection. Tesch (1990) placed phenomenography within the category of discovering regularities, focused on the discerning of patterns within conceptualisations. Marton (1981), on the other hand, provided a classification based on whether the research takes a first-order or second-order perspective. First-order studies aim to provide a description of a phenomenon as it is, whereas a second-order perspective describes reflected-on experience, how people perceive their experience of the world. Within a first-order perspective researchers may ask 'why' questions, but in a second-order perspective research questions are of a 'how' and 'what' nature instead (Yates, Partridge, & Bruce, 2012). Marton (1981) suggests that these two perspectives are complementary, and that both should be used in research. But within phenomenography it is the second-order perspective that is explicitly addressed.

4.2.1. Origins and Development of Phenomenography

The etymological roots of the word 'phenomenography' lie in the Greek words phainomen
and *graphein*, meaning appearance and description. Ironically, the term was originally coined in a text discussing phenomenological psychology and existential analysis by Sonnemann (1954). He described phenomenography as “a descriptive recording of immediate subjective experience as reported, for example, by a person under psychiatric examination” (Sonnemann, 1954, p. 344). It was first used and conceptualised in the pioneering work of Ference Marton, Roger Säljö, Lars-Öwe Dahlgren and Lennart Svensson at Gotenburg University in Sweden during the early 1970s as a method to study educational questions (Bowden, 2000; Hasselgren & Beach, 1997; Marton, 1986, 1994; Svensson, 1997). The approach was a reaction to, and sought to provide an alternative to, the positivist behaviourist approach taken towards research in education at that time. It sought to provide a relational, and experiential account for learning in juxtaposition to the strong trend within cognitive psychology at the time to focus largely on internal mental processes (Ekeblad & Bond, 1994). Phenomenography reorientated the approach to educational research by focusing on the content of thinking and the different ways in which phenomena are understood, rather than the information processing systems and cognitive processes studied in much of educational and psychological research aimed at describing how knowledge is stored or changed during learning (Svensson, 1989). Marton (1986) explains that early phenomenographic research had an explicit empirical and pragmatic basis, it “developed out of some common sense considerations about teaching and learning” (p. 40). Initial publications, such as Marton (1981, 1986), defined the spirit of phenomenography, but an extensive treatment of the epistemological and ontological assumptions supporting the approach did not appear until the publication of Marton and Booth (1997). Consequently philosophical and methodological principles were not always clearly defined. This often lead to phenomenographic researchers borrowing from several related traditions in formulating their own work, or unreflexive practice that took the ontological and epistemological basis of phenomenography for granted (Svensson, 1997; Yates, Partridge, & Bruce, 2012). This research enterprise was framed in three strategic ways: (a) understanding the variation in learning;
(b) exploring the meaning of variation in order to arrive at a way of describing the phenomenon of interest, without imposing an *a priori* model of description; and (c) studying the learner's experience of learning in order to arrive at better understandings of the meaning of variation in learning (Marton, 2000). Hasselgren and Breach (1997) recognised at least five different types of early phenomenographic work being practised including: (a) experimental phenomenography, which sought to analyse and categorise learning outcomes into an outcome space of different ways the same phenomenon could be understood; (b) discursive phenomenography, also often referred to as 'pure phenomenography', which was a direct corollary of phenomenographic assumptions and tries to map conceptions of the world in general for a group of people without regard to the discursive and hermeneutic qualities of text; (c) naturalistic phenomenography, which describes research in which an attempt has been made to record what is said or happens in a naturalistic situation. These data are then analysed with the goal of describing the various ways in which the phenomenon or activity can be experienced, possibly linking the resulting conceptions to their context; (d) hermeneutic phenomenography, which includes research that aims at interpreting texts that may not have been originally intended for phenomenographic analysis in order to discern the variation in the intentionality of conceptions through a hermeneutic circle of understanding; and (e) phenomenological phenomenography, which describes research in which variation in meanings is described, but researchers have striven to identify a phenomenological quality in their work, such as identifying the essence of particular conceptions. Criticism regarding the variation in practice and lack of methodological reflexivity among phenomenographic researchers led to efforts to refine and make explicit core principles of phenomenographic research (Hasselgren & Beach, 1997; Marton, 1988, 1995, 2000; Säljö, 1997). With these assumptions in place providing a more explicit framework to ground discussions in, methodological variations and questions could then be debated (Bowden & Walsh, 2000). Prior to theoretical and methodological explications that started becoming more widely available in academic literature in the late 1990s, entry into
phenomenographic work was largely restricted to becoming apprenticed to an already experienced phenomenographer. This could be one of the reasons for the apparent polarisation in approaches to the practical implication of phenomenography that seems to have taken place between Swedish- and Australian-based researchers (Åkerlind, 2005a). Developments in articulating the philosophical assumptions of phenomenography were soon accompanied with further theoretical developments in the structure of awareness. What initially started as an enterprise to describe different ways of experiencing (pure phenomenography), led to explanations of how phenomena could be experienced differently, focusing on what features of a phenomenon are discerned (or not discerned) within specific ways of experiencing – namely variation theory (Åkerlind, 2010). This then led to research into the critical aspects of the teaching situation, the space of learning, that made it possible for students to discern variation in aspects of a phenomenon – what became known as learning studies (Pang & Marton, 2005).

At present there is no single phenomenographic method. Instead methods of data collection, analysis and presentation vary considerably among different phenomenographic researchers, and even by the same researcher across different studies (Bowden & Walsh, 2000). A categorisation can be drawn between the Australian developmental approach, and the Swedish 'pure phenomenographic' approach. Bowden's (2000) developmental approach usually takes place in a formal educational setting, and seeks not only to describe how people experience some aspect of their world, but seeks to use the outcomes to enable students or others to improve learning. The methodological choices made in planning the research are informed by this purpose and context. Pure phenomenography has the explicit goal describing how people conceive of various aspects of their reality, namely phenomena subjects encounter in everyday life (Marton, 1986). Such research can and has been used in educational contexts, but the intention to do so is not explicit in the assumptions and methodological choices. Phenomenography has been taken out of the original educational context and has been used to study conceptions of topics outside of educational settings.
(Marton, Fensham, & Chaiklin, 1994). It has been used in both psychiatric nursing and general health care (Le Lievre, Schweitzer, & Barnard, 2011; Skärsäter, Dencker, Häggström, & Fridlund, 2003; Wirihana & Barnard, 2012). However, as far as the researcher is aware, it has never been used to study the different ways in which a therapeutic programme is experienced and structured in participants' awareness. It is suggested that psychologists' lack of exposure and awareness are to blame, rather than methodological incongruity. This study seeks to demonstrate its utility, and stretch the boundaries of its use.

4.2.2. Goals and aims of phenomenography

The goal of phenomenographic research is to map the conceptions a group of people have formed of the same phenomenon. The phenomena studied are either abstract, academic, 'second-order' knowledge; or reflected-on understandings of enacted, directly experienced events (McKenzie, 2010). Whereas conceptions are understood to be a way of experiencing or understanding something in terms of individual awareness, categories of description are used by researchers to denote them, and are understood as the qualitatively different ways a phenomenon may appear at the collective level (Johansson, Marton, & Svensson, 1985; Marton & Booth, 1997). It is the goal of phenomenography to capture what is figural in each participant's conceptions of a phenomenon in a specific context and time, and then summarise and document the collective meanings expressed during the encounters between the researcher and participants. These descriptions are relational, experiential, content-orientated, and qualitative. They are relational in so far as the focus of the research is on the relationship between the object and the subjective perception of the participants, this relationship being the conception being described (Marton, 1981, 2000). They are experiential, in that researchers draw on understandings from the point of view of the participants, which are formed through experience with the phenomena under investigation.
Descriptions are content-orientated in that it is content, the experience-as-described, that is analysed and compared, rather than the physical or abstract object or peoples’ cognitive structures, processes or behaviour (Marton & Booth, 1997). Finally, the descriptions formed are qualitative in that the intention of the researcher in forming categories of description is to expose the nature of qualitatively different ways in which individuals describe their experience of a phenomenon (Dall'Alba, 2000). The quality of a set of categories of descriptions is judged based on the extent to which (a) they reveal something distinctive about a way of experiencing a phenomenon, (b) each category stands in a logical relationship with other categories providing a logical structure, and (c) the number of categories in a set is a direct result of the extent of variation in meanings (Marton & Booth, 1997). As originally expressed by Marton (1981) the aim of phenomenographic research is to “find and systematise forms of thought in terms of which people interpret aspects of reality – aspects which are socially significant and which are at least supposed to be shared by the members of a particular kind of society” (p. 180). These forms of thought represent a limited number of ways a phenomenon can be experienced or understood, at a level of modes of experience or forms of thought that lies somewhere in between the common and the idiosyncratic.

The results of phenomenographic research most often include: (a) a detailed elaboration of the categories of description, (b) a detailed analysis of the relationships within and between categories, and (c) an outcome space (Åkerlind, Bowden, & Green, 2005). These outcomes taken together seek to describe the inseparable subject-object relations that are understood as the different ways in which the academic content, experience, or skill set as a whole is experienced (Yates, Partridge, & Bruce, 2012). Categories of description are a form of expressing conceptions of the phenomena under investigation as they are expressed by respondents in the context of the study, that may, or may not, describe the entire range of possible conceptions of a phenomenon (Barnard et al., 1999). Seldom do phenomenographers stop with basic descriptions of phenomena. Phenomenographic analysis often entails asking what are the implications of conceiving of a
phenomenon in a certain way, and why did those conceptions arise in the first place. The categories of description are analysed by looking at the structure of awareness that constitutes each category. The structure of awareness is an analytical concept prototypal to phenomenography, and suggests that the structure and meaning of the content are symbiotic (Marton, 1995). Although most phenomenographic research structures conceptions in a hierarchical relationship, it may be appropriate in some contexts to present the conceptions identified as a series of rival views that do not lend themselves to hierarchical organisation. Allowing for categories outside of rigid hierarchical representation prevents researchers from missing radical, paradigm-breaking insights (Cousin, 2009). The categories of description provide an “aggregate of basic conceptions underlying not only different, but even alternative and contradictory forms of propositional knowledge, irrespective of whether these forms are deemed right or wrong” (Marton, 1981, p. 197). Categories of description can be used in research results in two ways: (a) as an abstract instrument for description to be used in the analysis of concrete cases in the future, or (b) to focus on the applicability of the these categories in concrete cases, applying the categories to make a statement that individual X exhibited conception Y under circumstance Z (Marton, 1981). The relationships between identified categories of descriptions are represented in the outcome space, a diagrammatic or structural representation of the similarities and differences between the categories of descriptions resulting from the analysis. The outcome space synthesises the researcher's understanding of the complex of varying meanings which together comprise the way a phenomenon is experienced by the group of research participants. It represents the phenomenon not in the noumenon sense, nor as a subjective shadow of the real object, but a part of the whole which is subjective and objective at the same time in the same way as categories of description represent the conceptions they are constructed from (Marton, 2000; Yates, Partridge, & Bruce, 2012). It does not necessarily capture all of the possible ways a phenomenon can be understood, rather it attempts to capture how a phenomenon has been understood within a group of participants and the pattern of variation.
between these conceptions. Neither should it be used as a tool to elucidate ideal ways of understanding. How a phenomenon should be experienced is a value-based judgement that must draw on theory, values, and contextual factors that are not inputs into the phenomenographic approach. The outcome space provides a system of conceptual order, something Marton (1981) referred to as 'collective intellect'. The primal criteria for the outcome space is that it should (a) expose a distinctive characteristic about the phenomenon, (b) display the logical relationships between categories of description, and (c) represent the identified categories of descriptions in a parsimonious manner (Marton & Booth, 1997).

4.2.3. The Unit of Analysis in Phenomenography

The unit of analysis in phenomenographic research is the conception formed by participants of an experience or abstract concept. This distinguishes phenomenography from other research approaches that see people's perceptions as instrumental in exemplifying some more general phenomena (Marton, 1981, 1988). Barnard, McCosker, and Gerber (1999) suggest that conceptions “determine our judgement, direct our inquiry, and are the explanations for our everyday lives and practices. To be aware of conceptions is to be aware of our social reality and ourselves” (p. 219). A conception is understood to be “experiential, non-dualistic, an internal person-world relationship, a stripped depiction of capability and constraint, non-psychological, collective but individually and culturally distributed, a reflection of the collective anatomy of awareness, inherent in a particular perspective” (Marton, 1995, p. 171). It is experiential in that an object is known through interaction with the subject, the emphasis is on experience that has been reflected on to the extent that it could be discussed and described by the subject (Ashworth & Lucas, 1998). Conceptions are non-psychological in that they do not describe the processes of encoding, storage and retrieval upon which cognitive psychological research on learning and knowledge focus. Phenomenographers are
interested in content, but use assumptions about how knowledge structure and meaning are related to analyse conceptions. The ontological relational structure of conceptions used in phenomenography and its view of learning does mirror contemporary models of knowledge in cognitive psychology, which is unacknowledged in phenomenographic literature. Neurological and connectionist models of knowledge representation and learning, similar to the phenomenographic notion of conceptions, suggest that meaning derives from the relational patterns of connections between units, and learning results from adjustments to weights of connections or formation of more complex networks of connections at multiple levels (e.g. Kasabov, 2009; Laszlo & Plaut, 2012; Rogers & McClelland, 2008; Quartz, 1993). The conceptions described in phenomenography are constituted of the fragments of different ways individuals understand a phenomenon, they are constituted at a collective level, rather than describing the way a particular individual experiences the phenomenon. The description formed is “a stripped description where the structure and essential meaning of the differing ways of experiencing the phenomenon are retained, while the specific flavours, the scents and the colors of the worlds of the individuals have been abandoned” (Marton & Booth, 1997, p. 115). It is possible for phenomenographic descriptions to reveal the different discourses people are participating in rather than purely idiosyncratic descriptions of understanding (Patrick, 2000). They reflect the everyday living beliefs and social discourses that are repeated and used by people to make judgements (Säljö, 1997). The emphasis in phenomenography is on seeing conceptions as the meaning aspect of dynamic human engagement with phenomena within a specific context. That context shapes the aspects of the phenomenon that are attended to, and thereby the meaning that is derived (Ekeblad & Bond, 1994). Not only shaped by discourse and context, conceptions may be tempered by individual intellectual insights and creativity. Conceptions are “both numerous and contextual and reflect fluid variation in meaning as meaning floats between commonplace understanding, the context of experience, and intellectual insight” (Barnard, McCosker, & Gerber, 1999, p. 218).
During the first two decades of development, phenomenography was very elusive in providing a detailed description of what a conception is (Marton, 2000). The word conception was a translation from the Swedish expression 'uppfattning', but fails (as does the Swedish term) to completely capture the ideas behind the construct (Marton, 1995; Marton & Pong, 2005; Säljö, 1997). Consequently numerous interchangeable synonyms have been used to capture the idea of a conception including perceptions, meanings, ways of conceptualising, ways of knowing, ways of experiencing, ways of understanding, and ways of apprehending (Marton & Booth, 1997; Marton & Pang, 2008). Philosophical and theoretical developments in the field have resulted in greater clarity regarding the nature of conceptions. At present conceptions are seen to be composed of both a referential aspect (a particular meaning of the phenomenon) and a structural aspect (the combination of features discerned and focused upon by the subject). The referential aspect is the global or overall meaning attributed to a phenomenon based on the aspects discerned and focused on by the subject. It addresses 'what' a phenomenon is understood or experienced as (Marton & Pong, 2005). When analysing the referential aspect, focus is placed on the object aspect of the relation between subject and object, and comparisons and similarities are drawn in relation to the ways a phenomenon is described by the collective (Marton, 2000). The structural aspect addresses 'how' the combination of critical features are delimited and related to each other in order to make up an experience, how they are arranged in awareness, and how they delineate the phenomenon from other phenomena (Marton & Pong, 2005). To understand the structural aspect of conceptions, focus is placed on the subject aspect of the relation between subject and object, and an attempt is made to discern the totality of a person's simultaneous awareness (Marton, 2000). Originally, Marton (1988) dichotomised conceptions of awareness in the Gestalt notions of figure / ground. His later work borrowed and adapted Gurwitsch's (1964) description of awareness that conceptualised awareness as everything that is experienced simultaneously, at different degrees of awareness based on how figural, thematised, and explicit aspects of different phenomena happen to be at that time (Marton,
Marton (2000) links conceptions with awareness, stating that “we are aware of everything all the time. But we are definitely not aware of everything in the same way” (p. 114). According to this view the object of focal awareness is the theme of awareness, those aspects of the experienced world that are related to the object and in which it is embedded, are termed the thematic field. Themes in focal awareness constitute a gestalt together with objects in the thematic field that are associated by context or through relevance (Booth, 1997). The aspects of a subject's lifeworld that coexist with the theme, but are not directly related to its content or meaning, are termed the margin. Marton (2000) suggests that the conception of an object can be defined in terms of “the way in which it is delimited from, and related to, a context, and in terms of the way its component parts are delimited from, and related to, each other, and to the whole” (p. 110). Our experience of the theme, the object in focal awareness, is delineated based on the internal and external horizon of the object. The internal horizon, refers to how the parts of the theme, the critical features discerned, are delimited from and related to each other and the whole. The external horizon, refers to how the theme is delimited from and related to a context, it encompasses the thematic field and the margins as well (Marton, 2000; Marton & Pong, 2005). According to phenomenography, changes in the structural aspect will consequentially result in changes to the referential aspect. These changes can occur between contexts, or dynamically within the same context, as different aspects or critical features of the phenomenon are brought into thematised awareness (Marton & Pong, 2005).

4.2.4. Differentiating Phenomenography and Phenomenology

Interpretive Phenomenological Analysis (IPA; Smith, Flowers, & Larkin, 2009) has recently experienced a surge of popularity as a research design in psychology, particularly in health psychology (Smith, 2011). IPA draws on phenomenology, hermeneutics and idiography to define its
Researchers using IPA seek to describe how people make sense of their experiences, but acknowledge that such descriptions are interpretations and are always mediated by the context of cultural and socio-historical meanings (Shinebourne, 2011). Psychologists performing IPA often make use of psychological theory in addition to participant's accounts to describe a phenomenon (Larkin & Thompson, 2012). IPA is just one in a long tradition of methodological applications of phenomenological philosophy. Seeing as the goals of phenomenological research are generally to describe how people make sense of their reality, it is important to provide some clarification as to how phenomenology and phenomenography relate and differ, providing a justification for the use of phenomenography in the present study, rather than a more accessible and well-known methodology.

Making comparisons between phenomenology and phenomenography is complicated by the numerous variations of both approaches that exist (Richardson, 1999). For example, of the five types of phenomenography identified by Hasselgren and Beach (1997), only two show evidence of some developmental links to phenomenological philosophy. In general it is acknowledged that phenomenography did not develop out of, and although sharing similarities, is not affiliated with Husserl and Heidegger's phenomenology. Whereas phenomenology is the application of a philosophical method to research design, phenomenography is empirical, having developed out of research in the educational context into peoples' common conceptions with which they explain the physical and social world (Marton, 1981; Tesch, 1990). Of the available phenomenological traditions, only Giorgi's (1975) adaptation of philosophical phenomenology to research questions in psychology, allowing for third-person descriptions of participants' experiences, has been acknowledged as a precursor to phenomenography (Marton, 1986). On the other hand phenomenography has distanced itself from Husserl's phenomenology which is directed towards the pre-reflective world of consciousness, concerned with the nature of immediate experience rather than conceptual thought (Marton, 1981). Insofar as phenomenographic and phenomenological
researchers have studied the same subject matter aiming to provide a descriptive account, they are distinguished by the primary focus of the research. Phenomenology focuses on the general, necessary, inter-subjective and invariant essences in perceptions of a phenomenon. It aims to identify the eidetic aspects of a phenomenon, the essence of a phenomenon that remains largely constant across perceptions of that phenomenon. In contrast the focus in phenomenography is on the variation in empirical descriptions that can be understood in terms of their meaning and structure (Marton, 1981; Richardson, 1999). Phenomenography describes “relations between the individual and various aspects of the world around them, regardless of whether those relationships are manifested in the forms of immediate experience, conceptual thought, or behavior” (Marton, 1986, p. 42). The phenomenological movement seeks to formulate general principles about how things appear to us. Phenomenography, on the other hand, seeks to describe the ways various specific things appear to us (Marton, 2000). This focus can manifest at an individual level in phenomenology, with interest expressed in rich descriptions of individual accounts. The categories of description in phenomenography cannot be related to individuals, they provide a more holistic account that is derived from the collective, with a smaller number of coalescent meanings, and a focus on the key aspects of experience that link and distinguish the different categories of description (Åkerlind et al., 2005).

These differences in purpose play out in the analysis of data. Phenomenological analysis challenges one to enter a crisis in which the familiar is challenged, and reader and text must both give oneself to overcome difference. This often requires moving beyond what is said, engaging with what is meant but not explicitly stated, engaging with the shadows within the text. In IPA this entails utilising theory to guide hermeneutic interpretation of the text (Smith et al., 2009; Larkin & Thompson, 2012). Phenomenographic analysis on the other hand follows a clear directive to 'stay within the transcript', the analysis is restricted to those meanings that are explicitly expressed within the transcript (Barnacle, 2000). Seeing as phenomenology is interested in the comprehension of the
meaning of a text or action, analysis can begin from the first interview, and researchers are willing to spend time on unique themes that may shed light on the totality of a phenomenon. On the other hand, in phenomenography, researchers analyse all the interviews together, and focus on synthesising single utterances into categories of description (Tesch, 1990).

In conclusion, contemporary approaches to phenomenology (specifically IPA) and phenomenography share the same value in being able to describe the way in which particular groups of people understand their experience of aspects of their world. Both can be used to understand people in their socio-cultural contexts, and to evaluate efforts at bringing about change. Where they differ is in ontological underpinnings, analytical process and results. IPA produces descriptions that describe and interpret the essence of experience, balanced with ideographic focus, drawing from both descriptions and theory. Phenomenography produces an outcome space that describes how a phenomenon is understood within a group of people, and seeks to describe how conceptions are related and differentiated based on their structure of discerned features. This is particularly valuable for use in developing interventions to facilitate new and more powerful ways of experiencing a phenomenon.

4.2.5. Differentiating Phenomenography from Grounded Theory

Another research design with a long history of use in psychology is grounded theory. Grounded theory has two main traditions, the Glaser and Strauss schools, with many variations of practice that have emerged as a result of the needs of different researchers from different contexts. Some of these vary widely and even detract from formalised accounts of grounded theory (Hood, 2007; Kinnunen & Simon, 2012). Phenomenography too has many variations in the way it has been applied based on the context and intent of the researcher, which sometimes makes it difficult to legitimise and evaluate the approach (Bowden, 1994; Entwistle, 1997). By comparing
phenomenography with this well-known and established approach under the topics of aims, data collection, analysis, and evaluation of quality, a better discernment of the key features of phenomenography is envisaged.

Both grounded theory and phenomenography share emphasis between the goal of systematic description and the goal of generating theories of reality that are useful (Kinnunen & Simon, 2012; Tesch, 1990). The substantive theories (applying to specific situations) or formal theories (that address more cross-cutting phenomena) of both approaches aim to present an abstraction of people's accounts of reality that capture the complexity of the data in a parsimonious manner (Kearney, 2007). Where their aims differ is that grounded theory is an action-focused method, it aims to form a substantive theory or model that captures the essence of a phenomenon at a conceptual level, with a focus on the context, causes, and consequences that account for action or change, or the lack thereof (Corbin & Strauss, 2008). Phenomenographic research aims to describe the various ways a phenomenon is conceptualised and map the relationships between these categories of description, it is not structured to make direct inferences about causal connections (Ashworth & Lucas, 2000).

In terms of data generation, phenomenography and grounded theory share similarities but also have differences. Naturalistic methods like grounded theory normally emphasise prolonged engagement, and triangulation of data collections methods as they seek to gain as thick a description of the perspectives of each individual as possible. Phenomenography typically only uses one data source and collects this data in a single sitting. This is because phenomenography does not place as much emphasis on the individual, analysis and interpretation of meanings is based on the commonalities and variation of meanings within the pool of all collected meanings (Åkerlind et al., 2005). On the other hand, phenomenography has borrowed extensively from grounded theory, and similar approaches, in forming guidelines for the collection of information (Ashworth & Lucas, 2000).

Richardson (1999) suggests that the methods of data analysis in phenomenographic research
are indistinguishable from those of grounded theory. He also describes both approaches as struggling with the 'dilemma of qualitative research', the tension between trying to make qualitative research 'scientifically' respectable, and the hermeneutic search for authentic understanding. Both methods use an iterative analysis approach that uses comparison between categories to gradually lead to a complete account of the data that has exhausted the variation accountable by the data (Kinnunen & Simon, 2012). Where they differ is that phenomenography places emphasis on description, whereas grounded theory places emphasis on theory formation (Tesch, 1990). Both methods only compare findings to the literature and existing theory after descriptions and theories have been developed from the data (Barnacle, 2000; Glaser & Strauss, 1967).

Finally, in terms of their approach to research quality, both focus on ensuring rich and complete accounts of the research procedure. And both seek to ensure reflexive practice ensuring that outcomes of the study are rooted in empirical data rather than the researcher's conceptions or existing theories (Kinnunen & Simon, 2012).

### 4.2.6. Critiques and debates within Phenomenography

In this section various critiques of phenomenography, and debates within the field, are discussed. Critiques have been levelled from positivist, hermeneutic, critical, and post-structural perspectives. While quantitative researchers have tended to criticise the subjectivity involved in establishing categories of description, qualitative researchers see phenomenography as an errant branch of more established qualitative traditions. It is obviously not possible, nor the intention, to be all things to all people. As such, the criticisms presented here are not intended to detract from the value of phenomenography as a research method, but used to promote reflexive practice and warn researchers about the potential pitfalls they may encounter when using this design (Entwistle, 1997a). It should also be noted that some criticisms are dated, having particular value at a point in
time, and have served a purpose in facilitating developments in theory and method. Similarly, in its early stages phenomenography was “bedevilled by a lack of specificity and explicitness concerning both the methods for the collection and analysis of data and the conceptual underpinning of those methods” (Richardson, 1999, p. 53). This is not true of contemporary, well-conducted phenomenographical research (Bowden & Green, 2005). The discussion of critiques and debates will be structured in four themes: (a) problems with the structuring and interpretation of categories of descriptions; (b) questions about the consideration given to demographic variables such as gender, and contextual influences on knowledge construction; (c) concerns raised about the results and approach of phenomenographic research raised from post-structural and critical perspectives; and (d) the partisan development and inaccessibility of phenomenography.

Phenomenographic researchers grapple with the dilemma shared by all interpretive approaches, whether the results generated can be seen to represent authentic experiences of the participants, or whether they are merely the researcher's perceptions of the respondents' perceptions (Cousin, 2009). In supporting empirical validity, some researchers have advocated the use of member checks, but these are not congruent with phenomenography (Åkerlind, 2012). Collier-Reed et al. (2009) point out that generally individuals will “not be able to recognise ‘their’ contribution to the outcome space. The categories of description do not capture their ways of experiencing the phenomenon, but rather the experience of the phenomenon by all those in the study” (p. 47). Arguing for more acknowledgement of the interpretative process involved, Webb (1997a) critiques early phenomenographic work for attempting to develop empirical descriptions that demonstrate rigour and generalisability in an effort to receive scientific acceptance. Such approaches neglect the possibility that subject's statements obtain their meaning in relation to the researcher's preconceived ideas, rather than being grounded in the data and unfolding as a result of the research process (Grossman, 2002). Webb (1997a) suggests that phenomenography adopted short-term, controlled and instrumentally directed interviews and sacrificed hermeneutic care and authentic openness in
the development of empathy from the *verstehen* tradition. Ashworth and Lucas (1998) recognise the interpretive position of the researcher but advocate for the necessity to *epoché*, or 'bracket' the researcher's socially and historically 'contaminated' conceptual apparatus, allowing for results to stay as close to the text as possible. The influence of the research is most strongly felt during the analysis phase, when categories are created and structured. Whereas Webb (1997a) maintains that categories cannot be discovered outside of the historical and social experience of the researcher, Åkerlind et al. (2005) maintain that the structure of the relationships are not imposed onto the data based on value judgements of better or worse ways of understanding, rather they summarise the hierarchical inclusiveness of greater or fewer aspects of awareness found in the data. Trigwell (1999) concedes that categories of description cannot be empirically proven, there is no 'right' interpretation, but they can be defended and motivated based on the data. Working in teams, and harbouring attitudes of open-mindedness and awareness of alternative perspectives are seen as approaches to managing the need for empirical reports while acknowledging hermeneutic influences (Trigwell, 2000). The argument for greater hermeneutic emphasis, is mirrored by the concern for greater awareness of the role of discourse. Säljö (1997) suggested that the synonym often used for conception, 'ways of experiencing', is ephemeral and problematic. He suggests issues of communication, language, and meaning are primary. In this sense what people say is not so much their way of experiencing, but their particular use of specific genres of communication, and adopted predominant discourses, in order to answer questions about their conceptions in a specific context. Säljö (1997) suggests that “we have access to nothing but what people communicate (or what they do), and one should be extremely cautious of considering this as indicating a way of experiencing rather than as, for instance, a way of talking” (p. 178). Such accounting practices are explicitly available in language, experience is not. By using accounting practices to delineate what is studied no reference to experience needs to be made. However, attempts to ground phenomenographic results in discourse miss the purpose of phenomenography, which seeks to uncover respondent's
awareness or understanding of the phenomenon, not to provide a description of respondents' actual practice (Åkerlind, 2005a). Phenomenographers have generally acknowledged the role of the researcher and his or her social context in constituting and interpreting reality, but place the activity of discovering the underlying structure of how things work within the pattern of modernist thinking (Ekeblad, 1997). It is recognised that “categories of description are heuristic devices, they help us to advance our understanding of the phenomenon in hand, they do not have to carry the burden of being authentic in any way” (Cousin, 2009, p. 195). They owe their content to both the relation between research participants and the phenomenon, and the nature and context of the interaction between the researcher and the participants (Bowden, 2000).

A related theme of criticism is that phenomenography has failed to consider how context, demographics, and predominant discourses can shape the formation of conceptions, and ultimately categories of description (Säljö, 1997). Webb (1997b) argues that in phenomenographic research participants are viewed as containers for the storage of parts of collective conceptions, but that no consideration is given to the gender, social, historical, cultural or human understanding of the participants. He argues forcefully that “any learning theory which regards the concepts simply as the concepts, quite apart from the cultural experience of the learner, is, to say the least, somewhat limited" (Webb, 1997b, p. 227). For example, from a feminist perspective early phenomenographic work lacked appreciation of (a) women's participation as both researchers and participants in research; (b) consideration of the gendered construction of knowledge as a source of variation in phenomenographic research, and in the construction of dominant discourses within the fields in which phenomenography is applied; and (c) acknowledgement of the role of emotions in guiding, distorting, or manipulating the processes of reasoning (Hazel, Conrad, & Martin, 1997). Säljö (1997) argues that conceptions cannot be seen as limited to the relation between the individual and a particular phenomenon, conceptions are not formed solely from experience, they are grounded in discursive practices and gain meaning from their positioning within systematic discourses. The
ways people talk about phenomena reflect both social meaning, in that accounts are borrowed from the discourses I am exposed to, and individual meaning, in that I combine these discourses in innovative ways that convey my unique understanding. Säljö's (1997) position seems to suggest a dualistic ontology and presupposes that language, or discursive and social practices, presuppose experience. Marton's (1995) position assumes a non-dualistic ontology in which these elements are inseparable, and dialectically intertwined. If a non-dualistic ontology is accepted, one has to accept that conceptions are constructed through the relationship between the individual, phenomenon, and context (Ekeblad & Bond, 1994). Marton and Pong (2005) presented a framework in which the formation of conceptions can be explained on the basis of particular types of experiences, within specific concepts. In this framework variation of certain critical aspects of a phenomenon in an experience are required for that aspect to be discerned, in like manner in order to experience a phenomenon in a specific way variation between specific aspects must be discerned. A common point of agreement between Marton and Säljö, vital to an understanding of the value of phenomenography, is that the way something is conceptualised or talked about by an individual, shapes that individual's way of experiencing reality, and consequently their behaviour: “Stories we hear and tell will become stories we live” (Säljö, 1997, p. 184). What remains to be explained and developed is how generalised conceptions that are unreflected but inherent to the understanding a specific context differ from generalised conceptions that students can analytically separate from the specific context (Marton and Pong, 2005).

The third category of criticisms are those that have been informed by post-structural and critical theories. Webb (1997a) critiques the assumption that discovery of categories, such as deep and surface learning, reveal some absolute truth about phenomena in the world. Rather, he asserts that phenomena have no meaning of themselves, their meaning is created through a process Derrida calls differance (the endless 'differing' and 'deferring' ingrained in any attempt to find meaning). As such the conceptions discovered are the product of spatially and historically situated discourse.
Webb (1997b) suggests that endeavours to empirically validate phenomenographic results amount to "a community of scholars, working within a common set of assumptions, which inform research questions … these are the (hermeneutical) 'prejudices' which guide expectations" (p. 227). The main defence against a post-modernist deconstruction of phenomenographic results is that the results that have been produced, whether constituted from an absolute reality or discourse, are easily comprehended and have universal utility (Entwistle, 1997b). Phenomenographic research has provided powerful and simple descriptions which convey complex pedagogical principles in readily accessible ways. The results that have been produced meet one of the strong tests of value in qualitative research, that findings describe a 'recognisable reality' (Entwistle, 1997b). From a critical perspective phenomenographers have been urged to take note of how their research 'discoveries' may simply perpetuate the power relations in how truth claims are validated. Ekeblad (1997) argues that phenomenography is actively engaged in contestation and conversation between specialists and educational generalists, but practitioners of phenomenography are in general committed to some ideas and modes of reasoning as more fruitful than others and take the responsibility of making these ideas available for the appropriation of students. Phenomenography has failed to be politically radical, simply because the needs of users have been to teach their own discipline in effective and interesting ways, not challenge existing knowledge frameworks (Entwistle, 1997b). Seeing as most phenomenographic researchers are grounded in a modernist worldview, post-modern rhetoric is perceived as complex, embracing shifting surfaces of simulation, and exclusive, not meeting the needs of the consumers of phenomenographic research. Ekeblad (1997) suggests that post-modern critiques of phenomenographical methodology on the basis of research results are an example of ontological gerrymandering, constructing boundaries between what is seen as an objective reality (phenomenography), and what is seen as a socially and historically contingent activity (its hegemony of educational discourse).

The final category of critiques that has been raised address the exclusiveness of
phenomenography. Some phenomenographic research and writing has been criticised for its partisan
development in localised bastions of theory and methodology development at specific universities
in Australia, Sweden and China. This is reflected in reference often being made to less widely
available books, dissertations, and conference presentations from these universities with scant
reference being given to major relevant thinkers in such a universally relevant field such as teaching
and learning (Garcez, 2005). For example, Åkerlind (2005b) suggests that treatments providing
“explicit delineations of dimensions of variation is still largely confined to research theses and
conference papers” (p. 127). This has restricted the use of phenomenography to individuals who
could secure a type of apprenticeship with an expert in one of the centres of phenomenographic
activity (Bowden & Green, 2005). However, this is changing with accounts of phenomenographic
methods becoming available for other fields (e.g. Barnard et al., 1999), and more international
representation among phenomenographic publications. For example, the EARLI SIG 9 Conference
held in August 2012 in Jönköping, included presentations from Canada, the USA, Germany, South
Africa, Estonia, and Finland indicating the inclusion of voices outside of phenomenography centres
in Sweden, China, Australia and the United Kingdom.

4.2.7. Relevance to the Present Study

The above discussion has described the history, goals, concepts, weaknesses and strengths of
phenomenography. The goal of this study was to describe the different ways in which the adventure
programme participants experience, perceive, or talk about the programme. Adventure
programming is based within an experiential learning framework that sees experience and reflection
as crucial processes in the formation of meanings. These meanings of the experience are valuable as
they are directly related to the outcomes of the programme. Phenomenography is valuable as it not
only provides a rich description of the meanings formed by participants, it also provides a
framework for diagnosing more and less powerful ways of experiencing, and includes analytical processes to elucidate the aspects of the experience that are critical to different conceptions of the programme. These critical features can be used to develop theory, and tie in directly to research on mechanisms of change within the adventure programme.

4.3. Sampling Procedure and Participant Characteristics

Choosing the most effective method for selecting the most appropriate participants is contingent upon the purpose of the study, this is particularly so in qualitative research (Krahn & Putnam, 2003). Seeing as the goals of quantitative and qualitative studies differ, it stands to reason that their sampling methods do as well. Quantitative research favours probabilistic random sampling methods, allowing researchers to estimate the appropriate sample size prior to initiating research in order to attain a desired level of statistical power during analysis (Suresh & Chandrashekar, 2012). Such probability sampling techniques are not appropriate for qualitative research because: (a) the small sample generally used in qualitative research will generate an equivalent volume of data to a large quantitative sample, but deviates from normal distribution theory due its small size; (b) there is no evidence that beliefs, perspective, attitudes and the other phenomena studied in qualitative research are normally distributed in the population; (c) the characteristics under investigation are not explicitly defined before completing a qualitative study; and (d) choosing respondents that will provide rich meaningful descriptions is accomplished more effectively purposefully than randomly (Marshall, 1996). Theoretical and purposeful sampling methods are more appropriate to the needs of qualitative researchers. Theoretical sampling methods are aimed at choosing a sample that allows one to extend or refine a theory, and is often used in grounded theory. They include extreme or unusual case sampling, central case sampling, typical or paradigm case sampling, similar case sampling, and sensitive or political case sampling (Auerbach
& Silverstein, 2003). In purposeful, also called judgemental sampling methods, participants are specifically chosen because they are judged to be more likely to produce data valuable to the particular study than subjects not chosen. Examples of such sampling methods include maximum variation sampling, deviant sampling, critical case sampling, key informant sampling, snowball sampling, and confirming or dis-confirming sampling (Marshall, 1996). Phenomenographic research uses a purposeful, maximum variation sampling approach. The idea is to choose a sample that includes people with as many potential understandings or experiences of the phenomenon as possible. For this reason as much demographic variation as possible should be included in the sample, but the sample need not be demographically representative of the population, rather it is expected that the range of meanings within the sample will be representative of the range of meanings within the population (Åkerlind, 2005b). To limit the effect of the researcher's preconceived notions and theories “the selection of participants should avoid presuppositions about the nature of the phenomenon or the nature of conceptions held by particular 'types' of individual while observing common-sense precautions about maintaining 'variety' of experience” (Ashworth & Lucas, 2000, p. 301).

In addition to sampling technique, the sample size is an important consideration. Determining in advance the appropriate number of participants to include depends on the epistemological, methodological, and pragmatic realities of each specific study (Baker & Edwards, 2012). For example, studies aiming at rich descriptions of uniqueness require fewer participants than those focusing on analysing similarities and differences. Studies that follow an iterative sampling procedure till saturation can start off with smaller targets than those following a more linear collect-then-analyse approach. The amount of time and number of commitments can also limit the number of participants a researcher can practically include. Ultimately, it is important to be aware of the expectations and criteria set within the epistemic community in which the research is situated, and aim for “what constitutes excellence rather than adequacy in your field” (Charmaz,
cited in Baker & Edwards, 2012). In phenomenography an absolute minimum of 10 participants has been suggested. Between 15 to 20 participants is deemed sufficient to reveal most of the possible variation in conceptions and allow for defensible analysis and interpretation. However, more than 30 can make data manageability during analysis difficult (Ashwin, 2006; Bowden, 2005; Larsson & Holström, 2007; Trigwell, 2000). Absolute sample size criteria have a limited heuristic value, consideration should also be given to the amount of data collected from each respondent, the research context and quality of the data – the depth, duration, and durability of participant interaction (Elliott, 2012). Engaging, earnest conversations characterised by searching probes and calculated cross-checks require fewer respondents than on-line surveys utilising open-ended review requests. Similarly, a longitudinal design, incorporating prolonged engagement over developmentally varying exposure to a phenomenon will necessitates fewer subjects than a study measuring a snapshot of conceptions among a collectivistic, homogeneous sample with strong social norms and communal discourse. The ability of the researcher to explore a plurality of meaning, as well as contested or silent spaces of participant's experience contributes to the saturation of data achieved within a given sample size. Furthermore, if one desires to include additional procedures following the phenomenography, such as statistical analysis, the sample size needs to meet the requirements of these additional procedures (Bruce, 2006, Pang, 2010).

The sample used in this study consisted of 37 grade 9 high-school pupils that completed a 27 day school-based wilderness experiential programme. Of these 19 were male and 18 were female. The participants in this sample came from families occupying upper-middle to higher socio-economic levels, and were almost exclusively white. By sampling individuals from similar socio-cultural contexts some degree of commonality in meanings could be assumed (Watkins & Bond, 2007). For this reason the general limit of 30 participants was exceeded in order to ensure maximum variability of meanings was included in the study sample while maintaining practical feasibility. Detailed demographic details are not provided as they are irrelevant and pose an ethical
risk. The categories of description formed in phenomenography are representative of collective meanings, a particular conception cannot be tied to a particular participant. As such detailed descriptions of individuals are not of value. Furthermore, seeing as quotes are used extensively throughout this paper, including more detailed demographic information only increases individual's vulnerability to identification violating their ethical right to confidentiality (Bowden 2005; Thompson & Chambers, 2012). The information provided above should be sufficient to make judgements about transferability. The sample in this study was chosen because of the characteristics of the programme, not those of the sample. This particular programme is most likely the premium outdoor education adventure programme in South Africa at this time, with participants covering over 360km on foot, bicycle and canoe, and engaging in a variety of activities with therapeutic value such as framing, group reflection, journalling, and a 30 hour solo. All of the students in grade 9 attend the programme, and are divided into groups of approximately 18 participants, with each group supervised by at least two accompanying adults. During an orientation programme for participants and their parents the nature and intentions of the research were explained, and all of the programme participants were invited to participate in the study. Subsequently, all of the programme participants received an informed consent form and a copy for their parents, which they could return if they wished to take part in the research. Approximately 60% of the sets of completed informed consent forms were signed and returned to the researcher. At this stage the programme staff, who knew the participants well, selected 40 participants from the pool who had volunteered to participate, based on two criteria. Firstly, they chose participants they felt would provide valuable information and engage meaningfully with the research. Secondly, participants were chosen so that subjects would be evenly distributed between each group, ensuring an even spread from among the programme participants and groups.
4.4. Data Generation

The data generation phase of a phenomenographic study is critically important: “the quality of the final research outcomes starts with the quality of the data collected” (Åkerlind, 2005b, p. 109). The data collection method is chosen based on the phenomenon and context of the study, but ideally it should be “as open a technique for eliciting experience as possible” (Ashworth & Lucas, 2000, p. 302). There are a number of forms that data can take in phenomenographic research including historical documents, open-ended items in self-report questionnaires, focus group discussions, drawings, email or on-line communications, photographs, video recordings, and observation. By far the most common is semi-structured in-depth interviews (Bruce, 1998; Edwards, 2007, Marton, 1994). Individual, semi-structured interviews were used to generate data in this study. The important characteristics of phenomenographic interviews that were used to guide the data generation procedures in this study are described first, and then the actual processes of recording and storing of interviews are explained.

4.4.1. Important Qualities for Phenomenographical Interviews

Interviews are used and viewed differently from within each specific research tradition. For example, positivists aim for sterilised interviews they believe provide a 'mirror reflection' of the real world. Emotionalists strive for open-ended, unstructured interviews they believe provide authentic accounts of subjective experience. On the other hand, radical social constructionists see the interview as an interaction in which narratives are constructed that tell us nothing about a reality 'out there' but merely reflect the context and discourses present in the interaction between researcher and participant. The interactionist approach taken in this study is that interviews can not provide a mirror reflection of a singular objective, or absolute world 'out there', but they do provide
access to participant's 'objectified worlds', the meanings participants attribute to their experiences (Miller & Glasner, 2004). In phenomenographic interviews you are trying to elicit underlying meanings and intentional attitudes towards the phenomenon being investigated (Åkerlind, 2005a). As such the the key criterion for judging the value of an interview is “whether or not it gives access to the participant's lifeworld” (Ashworth & Lucas, 2000, p. 305). The role of the interviewer in this process is crucial, they must facilitate the respondent to reach a state of 'meta-awareness' in order to be able to articulate their conceptions of reality (Marton & Booth, 1997). The interviewer must also ensure that sufficient depth is reached, the interview should not reflect superficial chatter that typifies everyday conversation, a “well-conducted interview inevitably results in the person interviewed revealing something about themselves they had not expected they would” (Bowden, 2005, p. 31). Bowden (2000) suggests that initial responses should always be followed by requests for further elaboration and clarification, aimed to get interviewees to fully express their understanding, and reflect on what they have said. Asking them to comment on apparent inconsistencies between statements is valuable, but caution should be expressed not to enter into dialogue and contention, which may subvert interviewees' views and introduce the researcher's own views in an unplanned way. Great care must be taken to ensure that the data generated are authentic to the participant. Interviewers must take care that they focus on meanings that appear significant to the interviewee, rather than being seduced by meanings of interest to the interviewer. They must be careful not to ask questions that lead the interviewee or introduce ideas about the phenomenon not previously mentioned by her or him. Keeping questions as open-ended as possible allows the subjects to “choose the dimensions of the question they want to answer. The dimensions they choose are an important source of data because they reveal an aspect of the individual’s relevance structure” (Marton, 1986, p. 42).

During the process of data generation, interviewers must keep in mind the strengths and limitations of the interview. The strength of the interview is that it is flexible, dynamic, uses the
prime modality people use in their everyday lives to communicate their knowledge and experience, and provides a space in which participants can self-reflexively navigate within and against established or collective narratives (Miller & Glassner, 2004). At the same time it is important to bear in mind that (a) language displaces the phenomenon being studied, and that familiar narratives and discourses may at times distort the meanings participants hold or intend to communicate; (b) an interview can never capture the complete meaning of a phenomenon, people present portions of their meanings that are perceived as relevant in the interview context; and (c) differences between the interviewer and respondent can create knowledge distances (Miller & Glassner, 2004). Interviewers must be aware of possible power relationships that could exist between the researcher and participants, and take steps in terms of manner, appearance and setting to ensure deep and open discourse that is needed to ensure rich data is nurtured (Booth, 1992).

It is advised that interviewers initially conduct a series of pilot interviews aimed at perfecting their phenomenographic interviewing skills. These should be conducted with people similar to the target sample, evaluated by an experienced phenomenographer, but not be included in the final analysis seeing as the interview process is still being refined (Åkerlind, 2005a; Bowden, 2005). Phenomenographic interviews usually begin with contextual questions, designed to create a relaxed and comfortable atmosphere in which participants can reflect on their experience or understanding of a phenomenon, and provide a natural transition to primary questions (Åkerlind, 2005b). The number of questions made up in advance is limited, most questions follow from what the subject says (Marton, 1994). An identical opening scenario is used for every interview ensuring that the same phenomenon is being studied in the same way across the research participants (Bowden, 2005). However, ensuring that exactly the same phrasing in each interview is used, should not come at the expense of the interview being as comfortable and conversation-like as possible. Åkerlind (2005b) suggests that “creating the desired atmosphere, may be more important in achieving the ultimate aims of the interview than maintaining absolute consistency in the
phrasing of questions” (p. 113). Primary questions, can take on three forms: (a) situated examples, which are questions that elicit descriptions of concrete examples of the participant's experience with the phenomenon; (b) problem questions, which present problems in the field under study designed to be diagnostic and reveal different ways of understanding and relating to the phenomenon; and (c) questions can take the form of a general, open-ended question structured in the form 'what is X?', followed by clarifying and probing questions based on initial responses (Åkerlind, 2005b; Bowden, 2000). Generally, 'what is X' questions tend to produce outcomes that are less varied, and tend to reflect the standard, espoused discourses within that context. These questions should be followed by 'why' questions, such as 'why did you experience x in that way?' (Åkerlind, 2005a). The intention of using why questions is not to explore causal attributions, but rather to elicit interviewee's intentional attitude towards the phenomenon they are describing (Uljens, 1996). Using why questions is challenging, particularly with laconic respondents, as interviewees often find it much easier to talk about what something is, rather than why they see it that way (Åkerlind, 2005b). Concrete examples are used “as a medium for exploring the way in which the interviewee is thinking about or experiencing the phenomenon, that is, those aspects of the phenomenon that they show awareness of” (Åkerlind, 2005a, p. 65). Situated and problem questions normally assist participants achieving greater immersion in the details of their experience, and reveals greater variation across the range of participants (Bowden, 2005). Marton (1994) suggests that concrete cases most often make up the point of departure, with the researcher then trying to encourage subjects to reflect on the example, situation, or problem and their way of dealing with it. Primary questions, are followed by unstructured follow-up questions, which are used to elicit the respondent's awareness or understanding of the phenomenon, and are more important in eliciting underlying meanings than pre-determined primary questions (Åkerlind, 2005a; Bowden, 2005). Researchers continue using follow-up questions and prompts until a sense of the respondent's intentions towards a phenomenon coalesces without causing undue discomfort or coming across as repetitive (Åkerlind, 2005b;
Ashworth & Lucas, 2000). Probes can be approached in a number of ways: (a) neutral questions aimed at getting the respondent to say more; (b) one can select a word or phrase in the participant's speech that seemed meaning-laden or significant for them, and ask for them to expand on that; and (c) one can compare something that had been expressed earlier with a recent statement, and ask clarifying questions about how these fit together or can be reconciled (Åkerlind, 2005b; Bowden, 2005). The way in which these principles and techniques were implemented in the present study is described below.

4.4.2. Description of the Semi-Structured Interviews used for Data Generation

Once participants from the volunteer pool had been selected, an interview roster was drawn up so that participants would be interviewed in the School library either one or two days after they returned from the adventure programme. All the interviews were held in an isolated room, closed off from the library traffic to ensure privacy, but with views to the library so that participants did not feel 'trapped'. The library was chosen as an appropriate venue to ensure a sense of familiarity, of being 'on home ground'. Seeing as phenomenographic interviews are often experienced as challenging and uncomfortable by participants (Åkerlind, 2005; Bowden, 2005; Marton & Booth, 1997; Trigwell, 2000), I took a number of steps to develop rapport and ensure the respondents were comfortable and trusted me and the process enough to provide frank responses. In terms of the setting I provided refreshments and encouraged participants to 'have a bite' while we chatted, and positioned the tables and chairs in a 'non-threatening' alignment allowing participants to choose whether they wanted to sit alongside me or at a perpendicular angle along the table. In terms of process, I started each interview with a casual chat explaining the purpose of the interviewees and distanced myself from the school in the sense that it was not one of their teachers or the institution trying to find out how they feel. I ensured privacy, and actively defended this when it seemed that
the possibility of someone overhearing our conversation could arise. During this initial exchange I contextualised the interview as a conversation initiated out of my interest in their experiences. I informed participants that the school had provided me with their description of the adventure programme, but was really interested in what it meant to them and how they experienced it. Adolescents generally respond well to interest in them, and I was cognisant of the tendency for adolescents to gravitate towards experimenting and exploring their social locations and identities during conversation (Miller & Glassner, 2004). Research focused discussion would begin with a general question asking what the programme was for the participants, how they would describe it to someone who knew nothing of the programme. Their initial responses were then expounded on and probed. Later during the interview I also asked situated questions in which participants were asked to describe events, experiences, and activities that define what the trek was for them, experiences they found significant. Although I kept the interview schedule, which is available in the appendices, on the laptop in front of me I tried to ensure that I remained engaged with the participants and paid little attention to the computer, which was also used to record the interview using the software programme Audacity. Audacity was used because it is open-source and has a number of functions useful during transcription, such as short-cuts for easy manoeuvring backwards and forwards through sound files, and manipulation of sound files when the recording is not clear. I felt that the laptop created less anxiety than an instrument identified as a recording device, and many of the participants completely forgot the session was being recorded unless it was mentioned again at the end of the interview. The questions were not always asked using exactly the same words, but all the interviews followed the same basic sequence of primary questions, with emphasis placed on follow up questions taken from what respondents had expressed. The interviews varied, some respondents were articulate and had reflected deeply on their experiences, others struggled to relate their feelings and thoughts. This required a certain degree of tact, flexibility and patience on my behalf, and I strived to maintain a comfortable atmosphere while encouraging respondents to delve deeper
into the meaning of the experience for them. I was very aware that there is a normative school discourse about the trek, and was sensitive to when respondents framed their answers in terms of 'they', 'he', 'she', or 'them'; often asking respondents if this was really what 'you felt'. At other times it was clear that participant's approach to the topic was framed in opposition to a 'authoritative discourse' of the programme, even though it had never been expressed by me during the interviews.

The interviews were emotionally and intellectually taxing. It was challenging to attend carefully to the meanings emerging during the discussions, keep track of ideas and themes expressed while listening to new information, and planning careful probes and clarifying questions. I was also very careful not it impose my own ideas or sentiments. I feel that this may have at times been to the detriment of deep expositions of themes I may have held together with participants. I would be cautious of spending too much time on a theme if I knew this was something I personally valued, anxious about how much of the attention to the theme reflected my interest and how much originated from the respondent. Striking a balance of not privileging personally interesting themes, and not discriminating against them was a continual challenge. I continually had to ask myself, and sometimes the respondent, how important an aspect of their description really was to them. By the end of 4 or 5 interviews I would feel drained. At the end of each interview I would ask whether there was something important that I had not asked, or that they felt should be said. Often this resulted in further discussion. And once I felt that the topic had been exhausted I would thank the participant for their responses, remind them once again of their ethical rights, and where necessary would spend some time with respondents to discuss their feelings or debrief them. A few of the respondents were conscious of what would be shared and what wouldn't, and would explicitly state 'OK, you didn't get this from me', or 'don't repeat this to anyone', and almost all of the participants expressed awareness of a strong norm that 'what happens on the programme stays on the programme'. Most of respondents noted that they had enjoyed discussing their experience, even when it had evoked emotional content, only very few were indifferent, and none expressed any
regret or duress for having participated. I started the process of transcribing the recorded interviews verbatim into a word processing package as soon as the first interview was started. However, the transcriptions took a couple of months to complete. The primary researcher conducted all interviews, transcriptions, and data analysis himself. Although a lot of work, and very time consuming, this did allow a much deeper and more intimate understanding of the nuanced meanings and contextual triggers not captured in spoken language. During transcription emotional cues, and events that would add to a better understanding of communicated meanings were captured.

4.5. Data Analysis Process

The process of data analysis in phenomenographic research has been described as “tedious, time-consuming, labour-intensive, and interactive” (Marton, 1986, p. 42), as well as “time-consuming and intellectually difficult and challenging” (Prosser, 2000, p. 38). What is implicit and unstated is that the effort is rewarding and worthwhile, leading to understandings not immediately apparent that can be used to advance understanding and practice. Phenomenographic analysis shares at least nine characteristics that are common to most qualitative forms of analysis (Tesch, 1990): (a) the analysis process is systematic and comprehensive, but not rigid, being driven and ending with the generation of insights; (b) attending to data includes a reflective activity of note or memo taking that guides the process and provides accountability; (c) data are segmented into relevant and meaningful units, while maintaining a connection to the whole; (d) the data chunks, or utterances as they are called in phenomenography, are categorised according to an organising system that is predominantly derived from the data themselves; (e) most intellectual tasks during analysis are achieved by the method of comparison and contrast; (f) categories remain flexible and must accommodate new data, they are never seen as rigid end products; (g) the hallmark of qualitative analysis is the insight and creative involvement of the researcher, requiring analysis to be an
eclectic activity, rather than a prescribed process; (h) analysis should be done artfully, and creatively, but the researcher cannot be limitlessly inventive, they require a great amount of methodological knowledge and intellectual competence; and (i) while much of the analysis consists of taking apart the data, the result is a consolidated, higher-level synthesis. On the other hand, phenomenography differs from the majority of qualitative analysis approaches in two main ways: (a) in phenomenography data collection and analysis are sequential activities, whereas analysis often runs concurrently, or cyclically, with data collection in most other qualitative analytical approaches; and (b) phenomenography uses a mapping process that is differentiated from a type of cataloguing process common in most qualitative analysis methods. Cataloguing results from a content analysis that lists themes talked about in the transcripts and demonstrates how many people talk about the phenomenon. The mapping approach looks for more holistic meanings, identifying the patterns in the themes and issues raised in the interviews (Bowden, 2005; Tesch, 1990). The process used in phenomenographic analysis normally consists of two main stages (Marton & Pong, 2005). The first stage consists of marking and segmenting the transcripts according to themes, and then identifying units, utterances in which sufficient evidence for a particular overall meaning has been expressed. In the second stage the structural aspect is investigated. The categories of description are studied in detail to identify the specific aspects of the phenomenon focused on, and how explicit variations in aspects discerned, as well as the variations implied by focus on specific elements, effect the meaning of conceptions. Within these two main stages there is considerable variation among phenomenographers. This has possibly been influenced by a reluctance on the part of phenomenographic authors to prescribe a specific technique for novice researchers to follow, fearing that analysis becomes rote rather than an empathic exploration of respondent's lifeworlds and intuitive discernment of conceptions (Bowden & Walsh, 2000). But some common principles of practice do exist and are discussed next (Åkerlind, 2002, 2012).
4.5.1. General Principles of Phenomenographic Analysis

In this section some general principles guiding the procedures used in phenomenographic data analysis are presented. Seeing as recorded semi-structured interviews were utilised for data collection in this study, as is common with most phenomenographic research, the present discussion uses them as a referent throughout. But the majority of the discussion applies equally well to other forms of data collection appearing in phenomenographic research. As a general rule “no analysis should begin before all interviews have been conducted” (Bowden, 2005, p. 19). The reason for this is that the group of interview transcripts are analysed as a whole, “it is not possible to even begin to describe the meanings encountered in individual interviews [until they are all complete], because each transcript only takes on meaning in relation to the others” (Åkerlind, 2005a, p. 66). Before the analysis can begin the recorded interviews must be transcribed verbatim, capturing the text of the conversation as accurately as possible in a format amenable to analysis. Significant shifts or expressions of emotion or non-verbal communication that can accentuate access to the intended meanings of participants should also be noted (Åkerlind, 2005b). All phenomenographic researchers start their analysis using these transcripts as the basis of their analysis. The analysis starts with a clear slate, there are generally no a priori categories or structural relationships defined in advance (Åkerlind et al., 2005). The first major decision that then faces the researcher is how to make the data manageable. This has been approached in a number of ways: (a) examine the data from different perspectives at different times following an iterative process (Bowden & Walsh, 2000); (b) start the analysis with a smaller subset of the data, and elaborate and test the initial categories using the remainder of the data (Prosser, 2000); (c) extract excerpts from the interviews that exemplify meanings and approaches to the phenomenon, and combining this into a pool of meanings that excludes irrelevant details contained in the original dataset (Svennson & Theman, 1983); (d) use just enough participants to ensure sufficient variation, but not too much to be
unmanageable (Trigwell, 2000); or (e) make notes summarising the main understandings contained within interviews that can be used initially, then later switch to using the transcripts to confirm categories, moving backwards and forwards between the two (Åkerlind, 2005a). Whichever approaches are used, analysis begins with trying to enter the descriptions of the respondent, and understanding the conceptions they are trying to convey. Meaningful units are identified where a shift in meaning has taken place. This process shouldn't be rushed, it is important “to slow down and dwell on what is being said and the manner in which it is being said” (Ashworth & Lucas, 2000, p. 304). During this phase of the analysis, researchers tend to focus on differences, resulting in an overproduction of categories, and overwhelming the analyst with variation. It is important not to assign labels to early, naming the idea tends to hamper refinement and further development of categories by restricting meanings to descriptions synonymous with the label initially given (Bowden, 2005). Listening to the interview recordings during these initial stages of analysis, rather than relying solely on the transcript, can be useful in facilitating immersion in the meanings and intentions of the respondents (Ashworth & Lucas, 2000). Bowden (2005) describes his approach to reading the transcripts as follows:

“If the interviewee is saying this about X or Y, what must the phenomenon mean to them? If they are now saying Z as well, does this change my interpretation of how they are seeing the phenomenon? It is possible to become distracted and to begin to analyse the various ways of seeing X, for instance ... I then ask myself about the significance of the key statement with respect both to the focus of the study and the meaning you can ascribe to the statement given the context in which it was provided” (p. 28).

During this step, and throughout the analysis, it is important that researchers bracket their own perceptions and interests in order to get as close to the intended description of the respondents' lifeworld as is possible (Ashworth & Lucas, 1998). Things that must be bracketed, both during data generation and analysis, include the goal of forming a typology of people's experiences, earlier research findings, pre-determined theoretical structures or existing 'authorised conceptions', the
researcher's own personal beliefs and knowledge, the applicability of specific research techniques prior to exposing the nature of the phenomenon itself, and importing the researcher's notions of cause-and-effect into the research context (Ashworth & Lucas, 1998, 2000). To prevent theoretical notions from influencing the interview procedure and analysis focus, Ashworth and Lucas (1998) suggest that researchers refrain from conducting an extensive literature review until the analysis are completed. In addition to *science*, in the sense of a body of 'known facts', researchers must refrain from querying the validity, correctness or falsity of the participant's description of their lifeworld. Generally novices to phenomenographic analysis struggle with bracketing their prior knowledge, and producing a coherent set of categories that goes deeper than a 'shopping basket' of categories based on a content analysis (Prosser, 2000). Indeed, Walsh (2000) suggests that the ability to bracket one's own perceptions to get underneath what participants were saying, and the various ways they were experiencing the phenomenon, not just the different ways they talked about it is the most important skill needed during data analysis. Once a first tentative set of categories of description is achieved, the stability of that interpretation must be checked. This is done by following an iterative process of adopting different interpretations when subsequently reading through the data. One continues to look for novel interpretations of the data until the basic meaning structure of the individuals' conceptions of their reality has been stabilised (Bowden & Walsh, 2000; Sandberg, 1997). Iterating through the text various times in the process of reconstituting and refining the categories is very important. Each reading is likely to bring new insights, and it may take as many as 15 readings before nothing new is emerging from an interrogation of the transcripts. Each reading should include a critical search for evidence that undermines the coherence of category descriptions or the differences between two draft categories (Bowden, 2005). It is important not to get caught up with linguistic variation in the words used, but to focus on differences that represent variation in underlying meanings. One has to look beyond the words chosen to symbolise meanings, and seek to understand the underlying intentional attitude of the
respondent to the phenomenon under investigation (Åkerlind et al., 2005; Prosser, 2000; Trigwell, 2000). To be effective researchers have to be able to distinguish between critical and non-critical variation in experience. ‘Critical’ variation is “that which distinguishes one meaning or way of experiencing a phenomenon as qualitatively different from another. ‘Non-critical’ variation in meaning is that which occurs within a particular way of experiencing, and does not distinguish between different ways” (Åkerlind et al., 2005, p. 82). Being able to question and see the data differently between readings can be facilitated by using strategies such as taking breaks from the analysis in order to return with a different mindset, working together with other phenomenographers as a critically reflective team, adopting a number of different imaginary roles during the process of interrogating transcripts, writing summaries, and looking for surprises and borderline cases (Ashworth & Lucas, 2000). During this stage, and later when structure is being defined, attention oscillates between trying to understand the phenomenon from the perspective of the respondent and the meaning of experience through a focus on the comparative collective experience by pooling and comparison of quotations (Ashworth & Lucas, 2000). Marton and Booth (1997) emphasise that the meanings of a phenomenon held by a collective will all be related. While each individual can experience the phenomenon in idiosyncratic ways, all these are related by virtue of their relationship to the phenomenon. As such, all phenomenographers are concerned with clarifying both the meanings contained in categories of description (the referential aspect of meaning) and discerning a set of logical relationships between these categories (the structural aspect of meaning) (Åkerlind, 2005a). The structural aspect of meaning is analysed by evaluating the dimensions of variation and themes of expanding awareness in the data. These are identified by looking for those aspects of the phenomenon that are referred to in some descriptions, but not in others, and are seen as critical in distinguishing between emergent categories of description. At the same time an effort is made to group these critical aspects into themes of expanding awareness running through all of the transcripts, or at least through all of the tentative categories of description. This is achieved by
identifying the different levels of variation expressed within these themes. A theme is generally critical when it occurs consistently across all categories, and seems useful in providing insight into what would be required to facilitate the transition from one way of experiencing to another (Åkerlind, 2005b). The analysis yields not merely a catalogue of ways a phenomenon is experienced, rather it “tries to make the variation in experience meaningful, by searching for structure and distinguishing aspects of variation that appear critical to distinguishing qualitatively different ways of experiencing the same phenomenon from aspects that do not.” (Åkerlind, 2005a, p. 72). Although the process described above seems linear and clearly formulated, there are significant variations in practice. Some of the key areas of variation are described in the next section.

4.5.2. Variations in the Process of Phenomenographic Analysis

Numerous researchers have provided sequences of steps, forming part of an iterative process, that can be followed in conducting a phenomenographic analysis. A table is provided in the appendices comparing the stages suggested by seven different authors, which shows considerable variation in how the grounding principles of phenomenographic analysis are applied (Åkerlind, 2005a, 2005b, Dahlgren & Fallsberg, 1991; Gibbings, 2008; Kinnunen & Simon, 2012; McCosker, Barnard & Gerber, 2004; Patrick, 2000; Prosser, 2000). In this section, some of the major themes of variation are discussed, providing an insight into some of the choices that can be enacted during the analysis.

The first source of variation is what researchers believe they are doing in the analysis. Whereas all phenomenographic analyses depart from the philosophy of studying the relationship between the respondent and the phenomenon as it emerges from the transcripts, some view this process as a construction of categories of description, while others the discovery of different ways
in which the world is experienced (Walsh, 2000). The process of construction supposes that the researcher's particular perspective takes precedence over the data in developing a description in instances where data conflict with the researcher's preferred framework. There is tension between the researcher's desire in phenomenography to construct tidy, hierarchical, and useful outcome spaces, and being true to the data which may not fit content expert's frameworks for that specific phenomenon. This view is motivated on the view that the data always present only a partial understanding of the phenomenon, and that inadequacies in the data mask, and not highlight, structural relationships. Furthermore, proponents of this view highlight that the relationship between the researcher and the phenomenon is acknowledged within the epistemological assumptions of the method (Åkerlind, 2005b). The danger of this approach is that results may be skewed towards an accepted or expert view of the phenomenon, some categories being added or failing to emerge in order to satisfy an existing framework, or imposing a logical framework not present in the data by the exclusion or reinterpretation of unorthodox utterances (Walsh, 2000). On the other hand, a discovery approach to analysis assumes that categories are constituted in the data and should be discovered by incorporating all aspects of the data, producing provisional results that present what is true in relation to the researcher's understanding at that time. In this approach, emphasis is placed on the similarities and differences in the data, rather than on aligning with existing theoretical frameworks. This view is justified on the basis that phenomenography is more strongly grounded as an empirical approach than a philosophical one. The data are what we have to base decisions on, and relying more heavily on empirical support limits the relational aspect of researcher and phenomenon in the analysis, accentuating the goal of presenting the relation of phenomenon and participants in the analysis (Åkerlind, 2005b). The danger of this approach is that it may be difficult to reconcile the meanings of utterances in their original context of the interview transcript, and their meaning within the pool of meanings that constitute the different ways in which the group can view the phenomenon (Walsh, 2000).
Another issue is the challenge of maintaining contextualised meaning both within the original interview, and in the context of collective meanings. Marton (1986) originally suggested that utterances, smaller excerpts encapsulating specific meanings, should be de-contextualised from the transcript and combined into a “pool of meanings”, which is then used for analysis. The problem with this approach is that when utterances are pooled together their original contextualised meaning is easily lost (Bowden, 2005). Prosser (2000) suggested that larger chunks of each transcript should be used, ensuring meaning remains contextualised within the transcript. On the other end of the continuum, Bowden (2000) advised using the entire transcript as a whole when conducting the analysis. The danger of using interview transcripts as a whole is that it places too much emphasis on the view of individual interviewees, and to an extent negates the variation in meanings that can come from within each participant's responses (Åkerlind, 2005). What is at issue in these approaches is the ability of the researcher to focus on collective meanings away from individual meanings, while not being unfaithful to the meaning of utterances in their original interview context (Åkerlind et al., 2005). Whereas this poses a challenge with the traditional manual approach to analysis, it no longer needs to be an issue with computer-aided qualitative analysis.

Another point of difference has been in the sequencing of moving between referential and structural aspects of meaning. Bowden (2000, 2005) suggests that the structural relationships formed during analysis, should come after the categories of meaning have been delineated, as the structure serves to extend the understanding we have of how categories relate to one another. Åkerlind (2005a) argues that structure is an integral part of the meaning of categories, and should be defined concurrently with categories as understanding of the one informs understanding of the other. The problem with defining relationships between categories too early in the analysis is that it may result in the researcher imposing their own logical conceptions on the data (Ashworth & Lucas, 2000; Walsh, 2000). On the other hand, not attending to the structure in the data till analysis is virtually complete carries the potential danger of failing to appreciate the role structure plays in
understanding meaning, and visa versa. Åkerlind (2005a) advocates for iterating between attending to structure and meaning concurrently during the analysis. She feels this is more in line with the epistemological underpinning of looking at the collective understanding of phenomena holistically, increases the potential for practical applications from the results, and provides a simultaneous focus on both variation and commonality in the data. Ultimately one's choice between these alternatives is likely to be influenced by whether researchers are oriented towards an empirical approach or maximising the logic and 'neatness' of results.

Finally, most phenomenographic analysis has traditionally been done independently, relying almost entirely on the researcher's phenomenographic experience and content-knowledge to ensure rigorous analysis and logical structuring of categories of description. However, strong arguments have been made by Bowden (2000) and Walsh (2000) for a collaborative approach to analysis. Walsh (2000) argues that a group process to analysis has the advantage of allowing different members to bring different strengths into the analysis. Working as a team on the analysis can facilitate constructive critical debate that results in more robust categories, and less prejudiced subjectivity influenced by any single researcher's perspective. On the other hand, teams can become self-affirming and stagnate through the process of group-think. To avoid this clear roles need to be established, with turns being taken to play a 'devil's advocate' role. In any event, a group process will always add more socially constructed nuances into the analysis than just being grounded in the data (Åkerlind et al., 2005; Cherry, 2005). Åkerlind (2005a) suggests that high quality phenomenographic research that makes a substantial contribution to our understanding of a phenomenon can be conducted by a single researcher working on her own. Walsh (2000) concedes that this is possible when the researcher “makes explicit his or her input into the analysis and allows other researchers to check, test and probe the initial results” (p. 30). The advantage of performing the transcription and analysis personally, is that familiarity with the data, and knowledge of nuances in the interview process are maximised (Åkerlind, 2005b). When working alone, the role of devil's
advocate and interpretation promoter needs to be filled by the same person – a critical approach to analysis becomes vital. This role ambiguity is more easily resolved when long breaks can be taken between sittings, as well as consciously, iteratively looking for incompatible examples as well as supporting ones. Ultimately, the decision is often made on the basis of pragmatism, whether the required resources are available, rather than the strengths of any particular approach (Åkerlind et al., 2005).

In addition to these main themes of variation in approaches to phenomenographic analysis, the analysis can be altered to meet specific research needs. For example, by combining the traditional approach of constructing a hierarchical outcome space with a thematic analysis and the description of individual profiles, affective information can be explicitly incorporated into the results of phenomenographic research (Ashworth & Lucas, 2000). Another example is a study by Pang (2010), in which the number of critical aspects of a certain phenomenon discerned was quantified, in order to be able to assign scores to specific answers, allowing for statistical analysis and inference from phenomenographic results.

4.5.3. The Use of Computer Software in Phenomenographic Data Analysis

There exist over 25 different software programmes designed to make qualitative analysis faster and easier, but they may not be appropriate for all forms of analysis (Willig, 2008). Most phenomenographic studies have utilised a manual analysis process, whereby utterances, notes, or transcripts are arranged and rearranged in piles on the floor in the construction of categories. Their relational qualities are represented by their positioning in relation to one another on the floor. Using this approach to analysis, there are four aspects of data analysis that pose a challenge in phenomenography: (a) the sheer volume of data, (b) the challenge of keeping in mind the meaning of an utterance in the context of the transcript as well as its contribution to the meaning of a category and differences between categories, (c) the long period of time it takes to iteratively
compare and contrast utterances before categories emerge and finally settle into somewhat of a final state, and (d) ensuring that categories emerge as a function of the meanings contained in the text, and not due to preconceived theories or biases of the researcher (Åkerlind et al., 2005; Bowden, 1994, 2005; Bowden & Walsh, 2000; Marton & Booth, 1997). Computer software has been available since 1990 to alleviate the challenge posed by these factors in phenomenographic research (Booth, 1993). Computer software can serve different functions during analysis. At the most basic level it can help with the storage and organisation of material, even if just for typing in and storing transcripts in a word processing package. At the next level, it can make data handling more streamlined by allowing selection and storage of quotes, saving notes and meanings assigned to such utterances, and reducing the cognitive load of keeping in mind all the data whenever looking at a single utterance by facilitating easier access to data in various contexts (Booth, 1993). At a more sophisticated level, computer software can automatically identifying concepts in the text using semantic and relational informational extraction. By utilising 'objective' parameters such as rank, percentage and frequency, computer software can provide a validity check against subjective researcher bias (Penn-Edwards, 2010).

Researchers have identified a number of strategies to facilitate manageability of the data, including the use of notes and transcripts as a whole as analysis strategies, and reducing the volume used at any one time (Trigwell, 2000). Computer software can provide a “fast, efficient method of sorting large amounts of transcripted data and identifying expressed concepts” (Penn-Edwards, 2010, p. 253). Computer software can also facilitate seamless switching between the original context of the transcript, and that of the collective meaning within and between categories. Penn-Edwards (2010) tested the ability of computer software to streamline the traditional manual phenomenographic process. She used the Leximancer package, a qualitative data analysis software using semantic and relational data extraction to automatically code and identify relationships between categories, while simultaneously performing a traditional manual phenomenographic
analysis. She found a high level of congruence between the concept maps generated manually and using the software, and reported that the results “validated, to me as a phenomenographer, that Leximancer is an acceptable phenomenographic tool” (p. 259). Penn-Edwards (2010) suggests that Leximancer provides a more expedient way of generating initial categories during the first stage of analysis when dealing with large volumes of data. Another role such software can play is as a check of bias in the development of categories. Such software provides “a clear bracketing process in identifying the concepts embedded in the responses” (Penn-Edwards, 2010, p. 263). Using computer software for analysis makes pragmatic sense, as it provides a more efficient process for comparing and grouping of utterances, allows you to assign reflexive comments to selected excerpts, and note the contextual factors relating to selected quotations (Cousin, 2009). Computer software becomes another tool in the researcher's belt, simplifying the management, coding, locating, control and review of data; “it does not eliminate the need for the researcher to think” (Jemmott, 2002, p. 7). Computer software does not replace the embedded role of the researcher, which is a critical part of reflexive phenomenographical practice (Penn-Edwards, 2010).

Booth (1993) suggests ten criteria any computer-assisted qualitative analysis software used for phenomenographical analysis should meet: (a) it should simplify the researcher’s management of transcribed interviews, while enabling easy access to the original data; (b) it should allow quote fragments in the transcript to be selected and assigned a theme; (c) these theme names should allow for strings long enough to be immediately meaningful to the researcher; (d) the themes should not need to be pre-specified, it should be possible for the researcher to create, change, add, and delete themes throughout the analysis process; (e) the quote fragments should be saved together with the themes assigned, general information about where the quote originated, and a researcher’s note; (f) it should allow easy access to the original interview context for any selected quote; (g) the researcher should be able to see a quote in the context of quotes with the same or similar themes; (h) it should provide a facility for maintaining memos on the evolution of the themes themselves; (i)
basic functions of sorting, selecting, and reporting should exist with variations that are useful in
different stages of a study; and (j) the software should be ergonomic and user-friendly to those with
low computer literacy skills (Booth, 1993).

One little-known open-source package that meets all of these requirements is RQDA
(Huang, 2009). This computer-assisted qualitative data analysis package is free, and ironically, runs
within the R statistical programming environment (R Development Core Team, 2009). It allows for
coding of themes, linking quotes to themes and access to the original transcript, writing of memos
attached to specific categories or the project as a whole, creating plots of the sociogram of available
categories, and can be used to interface with various text-mining packages available in R. Despite
running from R, it is fairly user-friendly and runs within a graphical user interface environment.
While I am not aware of RQDA having being used for phenomenographic analysis before, it has
been used in various other qualitative research contexts. For example, Van Windekens, Stilmant,
and Baret (2013) used RQDA in developing an inductive cognitive mapping approach for analysing
systems of practices and decision making processes linked to grassland management in a Belgian
socio-ecological system. Wu and Yip (2010) used RQDA to understand the characteristics and
substance of urban and rural grassroots homeowners' resistances in China using qualitative analysis
of news clippings.

4.5.4. The Analysis Procedure Followed In This Study

I performed two separate analyses of the data. In the first analysis, during which I used only
20 transcripts and piloted my analysis approach, my process flowed as follows. Once all of the
interviews had been transcribed, I then went through them again and removed any identifying
information from the transcriptions, provided pseudonyms for the participants, and saved these
cleaned and anonymous transcripts for use in analysis. The original audio files and transcripts were
compressed and encrypted using 128bit encryption with GPG before being stored. Initially, I began with just 20 of the transcripts. I read and re-read the transcripts a number of times to ensure familiarity with the texts, and re-listened to the audio recordings to get a strong sense of the nuances, emotional tones, and rhythms of each interview. In the next phase of analysis I highlighted utterances in the transcripts that seemed to express a particular experience or understanding of the programme. These utterances were then transferred to a spreadsheet document with three columns, a theme name, description and the quote used to derive the theme. I went through the transcriptions a number of times assigning themes, and comparing themes across interviews. At the next stage I started refining themes by looking at the list in the spreadsheet and trying to find similarities and differences between the themes that had emerged. Themes that seemed to overlap in meaning were grouped into categories, and themes that demonstrated qualitatively different ways of experiencing the same event were used to distinguish the categories. The categories were then linked with the outcomes discussed by participants in order to discern more clearly their relationship to one another. Outcomes served as a useful reference, as they provide an 'objective' reference frame for understanding relationships. In order to received feedback on the initial analysis, the outcome space was presented during a workshop with the adventure programme leaders. The organisers and leaders communicated that the framework had practical value in guiding practice, and helping them understand their goals in the programme. In addition, the findings were presented at the 17th annual Psychological Society of South Africa conference. Although I engaged in some affirming conversations after the presentation expressing interest in adventure programming, I did not get any useful critique of the methodology employed in the study. I then met with a researcher with extensive experience in phenomenographic research for more direct feedback on my analytical process. He provided some valuable feedback, and I decided to redo the analysis using his suggestions.

In the second analysis I decided to use RQDA to assist me in the process of analysing the
data. It had been a few months since I had worked on the data, so I decided to read through all of
the transcripts once again, making every attempt to look at it with “fresh” eyes. I decided not to use
the transcripts in their entirety because there were some participants who clearly described the
programme in one way, but would sporadically switch to qualitatively different ways of
experiencing when discussing other aspects of the programme, or relate moments that were
fleetingly experienced but not fully realised that could have changed the programme for them,
before switching back to their general convictions or reinforcing their original perceptions. I
imported the transcripts into RQDA in their entirety, and then set out to identify utterances that
encapsulated specific meanings given to experiences, or outcomes and experiences associated with
the research question, and assigned them to codes within RQDA. RQDA allows the user to assign
memos to the project, to codes, to specific utterances, or even annotate individual words. I used this
feature extensively so that I could quickly read notes on the insights gained in previous readings
and analysis, and so that I could contextualise utterances both in their original transcript and as they
related to other utterances within the same code at the same time. As I read the transcripts I
constantly asked myself, what does this say about how this individual is experiencing the
programme. Using a multi-screen set-up I was able to simultaneously work with a window
containing the original transcript, a window with all the utterances belonging to a single code, and a
window with the memo for the code I was working with. Some of the codes captured specific
experiences or ways of describing phenomena that appeared unique to a specific way of
experiencing the programme, others contained various utterances that seemed to convey different
ways of experiencing the same phenomenon. At this stage I tried not to worry too much about
whether codes contained descriptions of codes unique to a way of experiencing the programme, or
if they contained descriptions of aspects of the programme that were experienced in different ways.
Once I was happy with the way in which I had pooled together the data, I started to look at how the
descriptions of experiences gave evidence of different categories of description. Starting with the
codes of phenomena described in different ways, and then moving on to codes that were more specific and described specific ways of experiencing aspects of the programme, I noted similarities and differences and tried to organise these into tentative categories of description. I tried to look at the data from a fresh perspective and was cautious not to purposefully replicate the categories of description previously identified in my pilot analysis. Initially I simply labelled these numerically and using the code-categories function in RQDA associated codes with their respective categories. Seeing as some codes contained various ways of experiencing a specific aspect of the programme, they were associated with two or more categories, whereas others were associated with simply one. Using the plotting function of RQDA I was able to visualise these relationships, and after going through the codes, memos and actual utterances making up each category assigned them specific names. I then went about breaking up codes so that as many of the codes as possible contained utterances associated with only one specific way of experiencing that aspect of the programme. Associating these with existing categories, and comparing their content served as a process of validation, allowing me to confirm and test the congruence of categories, and refine their meaning. Next I worked through all the memos, and tried to identify the relationships between the categories by looking at the dominant aspects in each category, and dimensions of variation that helped to surface the logical relationships between the categories. These were then assigned to codes, allowing for me to plot the structural and referential aspects in an outcome space. Although the process is presented as a sequential series of steps on paper, in practice it is more iterative, with insights and conundrums at each stage leading to revisioning of earlier stages in a continuous cyclical progress that slowly moves towards resolution.

## 4.6. Evaluation of the Quality or Rigour of the Research

Early phenomenographic research was strongly criticised for its lack of precise descriptions
and reflexivity. A number of studies were published claiming to be phenomenographic, but with few clear descriptions available ended up lacking the necessary methodological validity in analysis or design, and brought undue criticism on the quality and rigour of phenomenographic research (Entwistle, 1997a). In spite of the lack of methodological and epistemological reflexivity authentic phenomenographic research has created a long and productive research tradition, contributing a mass of empirical data that has proven useful in advancing practice (Hasselgren & Beach, 1997). Qualitative researchers have taken three distinct approaches in their discussions on the nature of quality and rigour. The first approach represents an attempt to transfer criteria from quantitative research, such as validity, reliability and generalisability, directly into the context of qualitative research (Spencer & Ritchie, 2012). Phenomenography grounds itself firmly in a constructionist, interpretive framework, and so few phenomenographic studies have aimed to demonstrate quality using these positivist concepts (Sandberg, 1997; Webb, 1997a). The second approach represents attempts to develop naturalistic counterparts to the principles informing established quantitative criteria for quality (Spencer & Ritchie, 2012). For example, Åkerlind, (2012), Berglund (2006), Booth (1992) and Säljö (1988) continue to use words like validity and reliability in their discussions, while trying to align their meanings more closely with constructionist notions, while at the same time retaining some aspects of the original arguments in their descriptions. The third approach represents discussions that have aimed to abandon quantitative concepts in favour of qualities of research that foster a particular research epistemology (Spencer & Ritchie, 2012). For example, Collier-Reed et al (2009) and Dortins (2000) have opted to drop any reference to positivist terminology, and have transitioned to purely constructionist discourse. Spencer and Ritchie (2012) suggest that at the highest level of abstraction, evaluation of quality in most qualitative research concerns the contribution of the research, the credibility it holds, and the rigour of its conduct. Collier-Reed et al (2009) based their constructions largely on Lincoln and Guba's (1985) notions of credibility, dependability, confirmability, and transferability. They suggest that this framework holds
currency for phenomenographic research and elaborated on these concepts within a phenomenographic context. Grossman (2002) favoured Smith's (1998) notions of reflexivity, transparency, moral reasoning, and persuasiveness over other frameworks. Seeing as there is a fair degree of overlap in these frameworks, I have chosen to discuss the quality of this research using a framework of credibility, dependability, transferability and reflexivity.

4.6.1. Credibility

Collier-Reed et al (2009) describe Lincoln and Guba's (1985) notion of credibility as the truth value of an investigation, the degree of alignment between respondent's perceptions of phenomena and researcher's descriptions of their viewpoints. Credibility concerns the defensibility of interpretations made from the data, and the rigour of the process by which findings have been reached. Credibility is generally demonstrated in qualitative research by using extracts for defending claims, peer-review, member validation, and constant comparison methods (Spencer & Ritchie, 2012). While all of these can be used in phenomenographic research, member-checks are not appropriate for two related reasons. First, the categories are not derived from individual interviews, but an analysis of all the interviews against each other. No single single interviewee can evaluate a category, without being aware of its relations to all the other respondents. And secondly, once the interviewee reads through the categories of description, their perception of the phenomenon is influenced, and it is possible for them in this new context to see the phenomenon differently than how they had before (Bowden, 2005). Collier-Reed et al (2009) built on work done by Booth (2002) to suggest three types of credibility in phenomenographic research: (a) content-related credibility, (a) methodological credibility, and (a) communicative credibility. Content-related credibility relates to the researcher's comprehensive grasp of subject matter relating to the phenomenon under investigation, and even more importantly, the ability to be open to other
perspectives through the application of bracketing. Methodological credibility reflects the degree to which the goals of the study match up with its design and execution. Methodological credibility is synonymous with rigour. Rigour is concerned with audit-ability (careful documenting and reporting of important decisions, orientations, roles and impacts during the study), defensibility (demonstrating a clear logic of inquiry, a convincing rationale for the choice of research methods, and alignment between the sample and the research questions being addressed) and reflexivity (conscientiousness of one's conduct during research, and assessment of the impact one's role, presence, values, and theoretical orientation have played in guiding the research) (Spencer & Ritchie, 2012). Finally, communicative credibility refers to the researcher's ability to motivate and justify their interpretation of the data (Collier-Reed et al., 2009). Examples include publishing in peer-reviewed journals, presenting findings at professional conferences, consulting with experienced phenomenographers, and comparing findings with existing research on the same phenomenon (Åkerlind, 2005b). Entwistle (1997a) suggests that the ultimate test of credibility for phenomenographic research is “generally not its theoretical purity, but its value in producing useful insights into teaching and learning” (p. 129).

4.6.2. Dependability

Dependability relates to the consistency of research findings, and reflects on the quality and appropriateness of the research process. Consistency is a concept that needs to be approached cautiously within phenomenographic research. Phenomenography is based on the assumption that people's conceptions of a phenomenon are influenced by their experience with a phenomenon in a specific context. For this reason one cannot expect categories of description to remain static over time, readily available for replication studies to re-discover them again and again. However, they may reflect approaches to a phenomenon that are fairly persistent to changes in context and
historicity (Entwistle, 1997a). In addition, phenomenography assumes that people, including researchers, experience phenomena in a limited number of qualitatively different ways. For this reason it cannot be expected that different researchers studying the same phenomenon come up with the same conceptions (Cope, 2002). Marton (1986) draws an analogy between the process of phenomenographic research and the process of exploration or discovery – by their nature discoveries are not replicable. Placed in a field of data, two researchers would focus on different aspects in the process of discovery and despite diverging both discoveries could be useful, and both could be seen to do justice to the phenomenon. For example, two biologists working separately could classify a newly discovered cold-blooded animal that gives birth to live young differently by placing emphasis on different aspects of its anatomy or physiology (Marton, 1986; Säljö, 1988).

Variation in exploratory findings is not unique to constructionist approaches to research. For example, the latent common factors generated during exploratory factor analytic results are mathematically indeterminate, on the other hand confirmatory factor analysis can be used to test the fit of a previously 'discovered' factor structure to a set of data (Maraun, 1996; McDonald, 1996). Similarly, Marton (1986) suggests that expecting replication is inappropriate, but it should be possible to confirm original findings. Researchers could follow a confirmatory process of evaluating the fit of new data in different contexts to previously discovered categories of description. This approach has been widely practised by various phenomenographers (Collier-Reed et al., 2009). In summary, the main concern in dependability should not be consistency, but the source of variability. Variability to be avoided originates from the influence of the interviewer deviating from an emic perspective during the data generation, poor quality of recording or lax transcription of the interviews, and varying significantly from the data when forming interpretations during the analysis (Collier-Reed et al., 2009; Peräkylä, 2004). Variability across time and context, and between different researchers should be expected, but to some extent managed. In its most basic form, dependability requires that two researchers given the same data and process, with the same
knowledge of the method and phenomenon, should come to very similar findings (Collier-Reed et al., 2009).

There are a number of approaches that have been suggested for evaluating the dependability of phenomenographic research including having co-judges do a holistic analysis and performing coder reliability checks, dialogic reliability checks, and interpretive awareness (Åkerlind, 2012; Marton, 1995; Ryan, 2000; Saljo, 1988; Sandberg, 1997). Johansson et al. (1985) and Säljö (1988) have been proponents of coder reliability checks, suggesting that co-researchers analyse the same data against the conceptions identified by an original researcher. Coder reliability percentages are calculated, with acceptable levels ranging between 75 and 100 percent, demonstrating that someone else can see the same differences and similarities between utterances that the original researcher did. Sandberg (1997) criticises this practice on four accounts: (a) the possibility of specific utterances embodying more than one conception, and resulting in confusion between co-judges; (b) differences between researchers with regard to their familiarity with the data; (c) de-emphasis on the procedures followed, poorly collected data, or simplistic categorisations, could reasonably be replicated but do not demonstrate dependability; and (d) theoretical (constructionist) and methodological (objectivistic) inconsistency within phenomenography. Bowden (2005) is a strong proponent of dialogic reliability checks. This involves a number of researcher's actively collaborating in the analysis of data, performing critical roles to ensure that interpretations are vetted for rigour. Each member has the opportunity to defend identified categories, while others play the role of 'devil's advocates' challenging the robustness of each interpretation. Sandberg (1997) instead argues that dependability is better demonstrated through the use of interpretive awareness. This is done through phenomenological reduction, which requires researchers to "strive to hold back his/her known theories and prejudices in order to be fully and freshly present to the individuals' conceptions under investigation" (p. 209). This is done by: (a) being oriented to the phenomenon as and how it appears, from formulating the research question to evaluating the
results; (b) being oriented towards describing what constitutes the experience under investigation rather than trying to explain it, which immediately activates theories and models that are not part of the participant's lifeworld, but those of the researcher; (c) initially treating all aspects of the phenomenon under investigation as equally important, both during data gathering and analysis; (d) implementing a search for the structural features, or basic meaning structure, of the phenomenon being studied using the method of free imaginative variation; (e) using intentionality as a correlational rule by identifying what individuals conceive as their reality, identifying how they conceive their reality, and finally relating participants' ways of conceiving to what they conceive as their reality.

In this study coder-reliability and dialogic approaches were not feasible. In order to be appropriate co-researchers should be skilled in phenomenographic analysis and have a certain level of theoretical knowledge of the phenomenon being studied. Unfortunately, the researcher is not aware of anyone in the fields of psychology and adventure programming that could fit such a role. For this reason the approach of interpretive awareness was adopted, and care was taken in reflecting on practice from the early stages of conceptualisation, all the way through to analysis and presentation of the results. Some of the reflexive practice considerations taken into account are presented next.

4.6.3. Reflexivity

Cope (2002) suggests that the principle researcher's background, scholarly knowledge, and personal experience of the phenomenon under investigation should be disclosed, and forms an important component of the evaluation of the quality of the research. Seeing as this section is about my attributes, as well as decisions pertinent to interpretive awareness in the study, it will be written in a more personal style, hopefully optimising the reader's ability to understand and evaluate my
own reflexivity.

I am firstly a committed husband to my wife and father of two happy, and incredibly adorable daughters; then I am an admiring son of my fortitude mother. I am also a lecturer in the psychology department of a small private Christian University in South Africa. People know me as a hard worker, while my students miss-attribute this to intelligence; in essence I like to embellish what I do with my all, and want what I do to be the best it can be. At the same time I am a terrible organiser, taking on too much and seldom refusing a request, meaning I seldom organise my time to be able to achieve my lofty goals. An apt description of my knowledge and experience would be that I consider myself a “jack of all trades but master of none”. I have taught and have a fair depth of knowledge in a wide range of subjects including applied statistics, cognitive psychology, faith and psychology, ecopsychology, research methodology, community psychology, stress management and psychometrics. This diversity extends to my personal life as well. I love physical recreation like surfing, mountain biking and hiking - though I seldom have time to engage in them because I am busy with family or academics, both of which I also enjoy. I have a keen interest in technology, particularly open-source software, and could easily spend a whole night compiling and testing software. On the other hand, I am never as happy as when I can take my daughter out into the wilderness near our house where we spend time swimming in the pristine lake or climbing rock faces and boulders on the beach. I consider myself a deeply spiritual person, very aware of a deep and enduring connection to God, and this infuses my home, work, and teaching. A very big part of this spirituality is formed from my time in the wilderness, embraced by nature, in the solitude of being connected with the source that connects everything. It was these experiences and passion that led me to take the opportunity, after wilderness programmes started coming into vogue in South Africa as a diversion option in the late 1990s and early 2000s, to introduce ecopsychology into the BA psychology curriculum of my university. It was at this time that I started to really study deeply into the use of wilderness for personal development and therapeutic use. I also used the opportunity
to take students out on weekend wilderness trips where I started experimenting with some of the principles I had learned. When the time came to pursue doctoral studies I prepared two research proposals, one in the field of neuroscience looking at the interface between cognition and emotion, and another one in the field of adventure programming. Seeing as you are reading this study you know which one I decided to go with.

My personal, theoretical and experiential background seemed to interact most strongly with two phases of my research: data generation and data analysis. During data generation I was acutely aware of my inexperience in phenomenographic interviewing. While I had participated as a research assistant conducting interviews in large qualitative studies before, I knew that my approach had to be somewhat different as I was now seeking to discern different ways of experience. I did my best to ensure that I applied all I had learned in the texts I had read, and sought to steer participants into recollections of their own experience, rather than painting the picture reminiscent of a strongly indoctrinated school discourse, or allowing my own views of adventure programming and wilderness to taunt their expressive freedom. Being an adult male I was worried about how open the girls would be with me about their experiences, and whether the boys would steer towards stereotypical masculine interaction, but I feel this was not a significant problem. The girls did share intimate aspects of their experience, sometimes asking me not to repeat them to others, and some of the boys allowed themselves to be vulnerable in my presence. My evaluation of my performance was that I did my best, the quality of data is adequate, but I am sure there are some who could do better. Doing the interviews was incredibly draining, more so than any interviews I had previously done, and after about four interviews I really had to be self-disciplined to remain focused, think on my feet, come up with empathetic and yet challenging responses, and get as close to the participants understanding and conception of their experience as is possible with the tools available in dialogue.

However, it was more during analysis that I experienced struggles relating to managing the
influence my own knowledge, theoretical orientation, and expectations and desires for the study, would have on my findings. During the first stages of analysis, while I was immersing myself in the recordings and transcripts, and trying to identify utterances that would capture the meaning respondents' experiences held for them, I found I was able to engage the data without sensing too much intrusion from my own knowledge and experience. I even conducted the literature review after the analysis was all but completed to reduce the interference of established theories with the authentic discovery of patterns in the text. Nonetheless, at times I would associate the descriptions given by participants with particular depictions, models, or similar experiences from literature or my own experience. I felt that this was not disturbing the process of identifying meaningful utterances. However, when it came to grouping and differentiating utterances, and tentatively forming categories, I constantly “discovered” categories that fit well with the literature. This frustrated me, I wanted my study to be innovative, to extend the breadth and depth of knowledge in the field, not replicate it. In addition I was very aware of the temptation and possibility to direct the data, rather than let patterns organically emerge from the data. I struggled with this process, aware that whenever reading the text meanings would be interpreted and given meaning based on existing semantic structures, that the processes and neural structures that sort, structure and give meaning to our sensations are beyond volitional control. At the same time I was wary of fitting data to previously learned typologies or models. I was particularly cautious not to simply replicate my initial analysis, but to implement all the suggestions given to me by the phenomenography specialist. I found myself adopting a sceptical approach to categories that intuitively and theoretically made sense to me the moment the connections in my semantic framework lit up. I kept looking for something different, something that would push the boundaries. Aware of this pull, I would back off from the analysis, and delve into some unrelated work for a time, trying to break the mental set. Upon returning I would enter this emotional, and intellectual see-saw again, mindful of not looking for data to fit existing knowledge. At the same time I remained cautious of denying
structure that made empirical and theoretical sense simply because I didn't want it to make sense out of convenience, and because I was looking for that anomaly, the insightful pattern that would further knowledge and help theorists and field instructors improve their models and practice.

In addition to the intellectual and emotional struggle of the work itself, my focus and attention during this process was diverted by numerous life experiences that impacted me during the study. I lost my father and step-father to illness, and my grandmother was brutally murdered during the course of this study. I experienced great emotional turmoil as a result, and my health took a significant knock. However, these events were counter-balanced by my spiritual foundation, the birth of my second daughter, and the support of my wife, mother, and extended family who made it possible for me to complete this work.

4.6.4. Transferability

The goal of this study is not merely to form descriptions of experience relevant solely to the particular adventure programme on that particular year. The categories of description are used to generate principles to inform practice that should be relevant to other programmes operating in diverse contexts. At the same time, phenomenographic results cannot be seen as generalisable across time and context. Bowden (2005) strongly asserts that “no outcomes from phenomenographic research can be regarded as generalisations or universal statements” (p. 17). They are specific ways of experiencing a phenomenon in a specific context, by a specific group of individuals. While a groups' ways of experiencing a phenomenon could reflect a habitual human response to persistent phenomena in our world, and therefore be fairly stable across contexts and time. Ways of perceiving a phenomenon could also reflect the reactive discourses of a group of people to specific events and social forces operating within their particular context at the time of the research (Entwistle, 1997a). In the year data was collected from the adventure programme in this
study there were idiosyncratic events, such as the passing of a participant's family member, that had a profound impact on the meanings generated, and which may not be common in other instances of the same programme. At the same time, there are certain common features, such as the need for identity and affinity in adolescents, and the core roles played by events such as solo and debriefs, that are likely to be significant across various implementations of the programme. Effort has been made to ensure that abstract patterns described in this study's theoretical constructs are applicable in other contexts, even though their specific content may differ (Auerbach & Silverstein, 2003). As such the research evidence is seen to be of value beyond the context of the study itself, and enhances understanding or enlightenment within the field of adventure programming. Such transferability of findings can take place through inferential generalisation (application of findings from one context to another similar context), theoretical generalisation (by developing theoretical or analytical ideas that can be applied more broadly), representational generalisation (from the study sample to a broader population), or the educative or emancipatory impact a study has on participants (Spencer & Ritchie, 2012). Efforts have been made to provide sufficient details to allow consumers to judge the similarity of context and applicability of findings (Collier-Reed et al., 2009).

4.7. Ethics

Ethics refers to moral principles, derived from philosophical theories, which are used to make decisions regarding which actions are considered appropriate or inappropriate within the context of research activity. There are two main approaches to ethics: (a) consequentialist ethics, which emphasise the importance of achieving good consequences; and (a) deontological ethics, which emphasise the implementation of good actions in accordance with moral rules or duties (Thompson & Chambers, 2012). These approaches are not mutually exclusive, as the establishment
of moral duties is often based on their consequences - particularly their effect on the fulfilment of human potentialities – after which adherence to moral rules may be viewed as important to maintain the integrity of the rules themselves (Kelman, 1982). The researcher tends to follow a deontological ethical approach, based on a Christian ethic that places moral worth on actions themselves, and not merely based on their consequences. For example, while deception may be viewed as ethical from a consequentialist approach, it is not acceptable practice within the Christian deontological approach favoured by the author. Ethical practice is not simply the implementation of professional ethical guidelines, it is a complex decision making process involving consideration of relationships and emotions, reasoned judgement, and is informed by ethical guidelines and statutory laws (Thompson & Chambers, 2012). Ethical dilemmas often require researchers to entertain contrary sets of actions required by different ethical guidelines. These are resolved by placing priority on specific values over others (Garcia-Serrano, 1994). Ethical guidelines are most often based on four key principles: (a) beneficence (seeking to provide benefits and balance these against risks); (b) non-maleficence (the principle of avoiding causing harm in any of its forms); (c) respect for autonomy (the principle of upholding individuals' rights to make an autonomous, balanced and informed decision); and (d) justice (the principle of being fair in the distribution of benefits and risks (Beauchamp & Childress, 1989). Social control and power, which includes issues of governmental or institutional control of ethical issues, should be added to these as an important consideration (Kelman, 1982).

Before any research study is conducted an evaluation must be made of the basic nature of any risk envisioned, and the magnitude of any benefits to participants, science and society at large that are expected to accrue as a result of the study. The impact of the study on the participant, her relationship to the researcher, and the impact on action and ideology in society are all important (Kelman, 1982). A decision must also be made as to whether the study will be of high enough quality to deliver on expected outcomes (Shaughnessy, Zechmeister, & Zechmeister, 2012). When judging risks, the level of potential harm needs to be evaluated, as there are certain levels of harm
that cannot be legitimised no matter the benefits of the study. Harm can take many forms. The most commonly considered harm is emotional injury, but can also be physical, psychological, material, or interpersonal. While experiencing emotional distress is not necessarily harmful, and may even be beneficial, researchers must be mindful of the potential for distress and be practised at managing it. Participants should be empowered to stop the interview should they want to. Sufficient space should be provided for participants to reduce levels of distress following an interview, obtain additional emotional support if required, and reflect on the process (Thompson & Chambers, 2012). During the interviews participants often expressed emotion relating to their experiences, interpersonal relationships, or the social challenges characteristic of adolescence and high-school. The researcher made an effort to remain empathic, and helped participants manage any residual emotions at the end of the interview. In addition to this there is also stress and indignity, or diffuse harm that does not necessarily affect the participant or the group from which they come but may negatively impact on society (Kelman, 1982). An example of this could be Rushton and Jensen's (2005) research into race differences in intellectual ability, which can perpetuate discrimination and racial stereotyping. Most qualitative research does not expose participants to any direct physical or psychological harm. However, phenomenographic interviews require respondents to think about, and communicate, their thoughts about a phenomenon in more depth and detail than they may have before. This can make the interview a rather uncomfortable experience (Åkerlind, 2005b; Bowden, 2005; Marton and Booth, 1997; Trigwell, 2000). For this reason it is ethically imperative to ensure that processes are in place to make the experience as pleasant as possible for the respondents. In this study this involved making the setting comfortable and safe (through refreshments and familiarity of context) as well as through management of the researcher-participant interaction (remaining cordial, supportive, and spending time with participants after the interview to review their experience and deal with any latent emotions). One of the important components of ensuring beneficence and non-maleficence is respecting the autonomy of participants. This entails empowering participants to
choose whether they would or would not like to participate in research, based on a firm understanding of the nature, purpose and consequences of the research and participation therein. The principal, head of experiential education, and the programme director gave their consent for the study on 29th of September 2010, and again on the 8th December 2010. Following ethical review informed assent and consent forms were provided to all programme participants, and their parents, after a presentation of the research had been delivered by the researcher. Consent is not something gained once, researchers must provide participants with opportunities to reaffirm or withdraw their desire to participate in the study (Thompson & Chambers, 2012). This was done at the beginning of the study, and then reaffirmed at the beginning of each interview. Of particular concern in phenomenographic research is privacy and confidentiality, seeing as participants are disclosing large amounts of information that pertain directly to their identity – their experiences and conceptions. Confidentiality refers to information that may be accessible to the researcher, but needs to be protected from wider public access. For example, in some instances participants expressly requested that I not 'repeat this to anyone else'. In such cases sections of the interview were actually removed from the transcripts to honour the participants wish, even though they bore relevance to the analysis. On the other hand, privacy refers to information that one has not disclosed and wishes to keep private, such as information shared about the actions of a third party. Of particular concern is whether the public can identify participants based on information provided. For this reason it is common practice that “no published material ever provides quotes from interviews that could identify the interviewee” (Bowden, 2005, p. 31). In addition to following these controls, the researcher assigned pseudonyms to all participants, and limited the amount of demographic information provided so that community members are not aware who did and did not participate in the research.

Finally, the last important principle that needs to be acknowledged is social control. Whenever researchers and participants interact there is potential for abuse of power, for this reason
it is important that some authoritative body exercises control over ethical concerns. Researchers hold some responsibility for being reflexive about the role their own ambitions and agendas, as well as political and social discourses they are embedded in, play in driving the research in any specific direction. They must also be sensitive to power differentials between themselves and participants, and address potential power imbalances with the participant community early in the research process. Whenever researchers hold more than the researcher role, there is potential for conflicts of interest. It is important that researchers are aware of the roles they play, and critically consider how these influence participants and the research process (Thompson & Chambers, 2012). The most appropriate form of control are government regulations. One way in which such control has been instituted is the requirement for ethical review boards, or institutional review boards (IRB) to convene and take responsibility for monitoring the ethical quality of research conducted. In order to ensure that the ethical principles valued within psychology were upheld, and policies of the academic institution under whose authority this research was conducted, an Institutional Review Board (IRB) met in order to evaluate this study at the proposal stage. The research ethics committee approved the study and gave ethical clearance for the study on 15th December 2010.
CHAPTER 5:
RESEARCH FINDINGS

5.1. Introduction

Previous chapters have addressed the theory of adventure programming, literature on phenomenography, and outlined how this research design was implemented to investigate the different ways a sample of high school scholars experienced a wilderness adventure programme. As a philosophy of learning phenomenography suggests that learning outcomes depend heavily upon the aspects of experience that are discerned by the learner and brought into focused attention (Marton & Booth, 1997). This philosophical approach aligns well with experiential learning theory that has long emphasised the importance of reflection and processing of experience (Kolb, 1984; Lord, 2007; Nadler & Luckner, 1992; Wichmann, 1993). When applied in practice, phenomenography provides a methodology for analysing the aspects of a group's experience that are critical during processing (Bowden & Walsh, 2000). In this chapter the different ways in which the wilderness adventure programme can be experienced, the categories of description, are described and the critical aspects of the programme that significantly contribute to variation in experience, the dimensions of variation, are discussed. In essence, the extent to which programme goals are attained, and the mechanisms responsible for differences in outcome are explored. The wilderness adventure programme investigated was established primarily to provide:

“an opportunity for young people to embark on a journey of personal discovery: discovery about themselves, their talents, their likes and dislikes and about their lives ... the physical challenge of having to get from A to B, the practical challenge of preparing one's own food, washing one's clothes, fixing one's tent, the social challenge of having to recreate with the other people you are with and invent one's own entertainment, the inter-personal challenge of having to live in close proximity with others who are not of one's choosing and get on with them, the spiritual challenge of reflection – about themselves and their families, their lives, their God and His creation and their hopes and aspirations for the future” (Wynne, 2012, p. 2).
Based on the analysis of the data, there are four main ways in which the programme could be experienced, which can be arranged hierarchically based on the extent to which they represent achievement of the above stated goals of the programme. In addition there are six main aspects of the programme, which when experienced or perceived in different ways, contribute to the overall experience of the wilderness adventure programme. These findings represent conceptions of the programme constituted by focusing on the collective meanings given by participants to their experiences, they are not meant to represent separate individual's experiences (Marton, 1981). Following guidelines suggested by Åkerlind (2005b), an effort is made here to present these findings in a manner that remains as faithful as possible to the descriptions of the participants, is as understandable to the reader as possible, and provides persuasive support for the interpretations that have been made. The results are broken down into sections, focusing on different conceptions within the outcome space, and different dimensions of variation in isolation in order to assist the reader come to terms with the complexity of the data. A list of symbols used in the transcripts, and their meanings, are as also provided in the appendices to assist the reader in deciphering conversational nuances in the text. Extracts from the interview transcripts are set apart from the main body of the text, and the portions belonging to the interviewer are faded to light grey, making it easier to distinguish between participant, interviewer and interpretation. The extracts were selected based on the principle that they should provide illustrations that are representative, convincing and yet parsimonious (Åkerlind, 2005b). A graphical representation of the research findings is presented in figure 5.1, which condenses all the utterances and their relationships to the categories of description, while capturing their association to the dimensions of variation using different colours. Following this are sections which first describe the various categories of description that make up the outcome space, and then provide an analysis of the dimensions of variation. Finally the conclusions and implications of these findings, as well as the limitations and suggestions for future research are discussed.
Figure 5.1: Utterances, categories of description, and dimensions of variation
5.2. **Different ways the Adventure Programme can be Experienced**

Following an analysis of the 37 interviews conducted with the adventure programme participants, the researcher categorised the meanings presented in the transcripts into four separate, hierarchically structured conceptions of the adventure programme. These conceptions have been labelled to provide a quick reference to the composite meanings attributed to each as follows: (a) long gruelling school hike, (b) school initiation / rites of passage programme, (c) once-in-a-lifetime group adventure, and (d) multifaceted learning and development opportunity. These categories are represented in the graphical representation below, and discussed individually in the sections that follow:

![Graphic representation of the outcome space](image-url)
5.2.1. Long Gruelling School Hike

Within this conception of the trek, the focus of attention is very much on the physical aspects of the trek. Participants were preoccupied with the distance, difficulty, or discomfort of various aspects of the programme such as the hiking, cycling, food, or being placed outside of their comfort zone. Discussions of social challenges, or growth, or even positive aspects of the experience are all framed in discussions of what was physically experienced. Perceiving the physical challenges as unfair, extreme, or unnecessary was often associated with emotions like loss, sadness, and bitterness that manifest themselves as anger. At other times a sense of relief, an acknowledgement that this is something that had to be endured, and feelings of accomplishment are evident at having overcome these physical challenges. Examples of extracts illustrating such a perspective include:

“So in that first week I was just thinking oh my gosh what is wrong with those people, this is so hard, but um and I _ what was it that was so hard, what was it _ just the the walks, they were so long, and we had to wake up really early, and there were obviously some people in my group who weren't as fit and so and they had injuries too and so we had to go so slowly, and I know some other groups like arrived at 3 o'clock in the afternoon and we would like get there at 7, 8 at night because we literally had to like walk so slowly ... but um just the time it took, and we weren't used to our backpacks yet so that was really heavy _ OK _ and the food, we were all so hungry and then you get like a can of smash or some viennas like euw” (AS5BF)

“I felt for the first three weeks we were all there sitting twiddling our thumbs waiting for trek to become this amazing experience, every group has we were trying to live previous trek groups experience because we were being told oh no by day 6 trek begins to, trek is amazing and it is fun [paging through journal] and I wanna quickly quote it here, today was a stupidly long day over a huge amount of contour lines and we kept on going up and then down and up again I couldn't breath [long pause] ... Definitely my physical aspect, I'm sorry but it's all physical for me, trek, I'd been
told by a friend that trek is a mental journey disguised as a physical, no it was me expecting it to be mental and it coming out physical. That's what trek was for me” (JP5BF)

The physical aspects of the programme are viewed within the external horizon of poor group relations, failure to relate to or develop rapport with adult leaders, and disappointment over failed expectations of the programme. When discussing group relations participants would emphasise that close bonds were not being formed as they should, that groups fragmented according to physical ability, and that the types of group interaction typically experienced at school would repeat themselves in this new context, particularly when two groups joined together on the rest days. This perception strengthened the feelings of isolation from sources of support they normally hand, and resulted in increased resistance to the programme. For example:

“Yes we had debrief every day, or we were supposed to, at the end we got quite slack and skipped 4 or 5 days at a time [pause] uhmm, but day 22 was a rest day, the boys had, trek group [number] had just left from like before and trek group [number] wasn't going to arrive until about 3 4 o' clock. So we all sat down and said really the bs needs to stop ... we just had a look at trek as a general and how our group wasn't connected, we all admitted that our group wasn't feeling connected and if it is, if you do feel the group is connected then either your blind or your kidding yourself, so _ OK so everything sort of came out _ exactly, um things that needed to be changed and that the fact that we all needed to make an effort to bond, that effort wasn't happening … yes and nobody else in the group really seemed to understand they just thought that she was being miserable because she wasn't having a good time, it was on so many deeper levels than that” (JP5BF)

Participants that failed to look beyond the physical aspects of the programme tended to report poor relationships with leaders and experienced them as distant,
uninvolved, and unapproachable. Without being able to relate or experience positive
interactions with leaders, participants failed to relate to the overall goals of the
programme, or even with each other. Some adults were seen as modelling poor
adjustment to the programme, or were not able to fulfil the roles of expert or
supportive adult that the adolescents may have needed. Without adult intervention to
guide the development of values, norms, and goals for the group a social context was
created in which the members of the group failed to develop a social contract to grow
and focus on developmental aspects of the programme besides recreation and physical
challenge. Examples of extracts demonstrating such perspectives include:

“she has been in a very dark hole for a very long time and trek did
not help at all, um the leaders did not listen she was told when she
started trek, if she wanted to she could come off at any time, ... so
when the leaders denied her that right that she was promised, that
just sent her further in to the dark hole and they almost seemed
uncaring, she told me they didn't listen they didn't care, and I
could see that happening” (JP5BF)

“Uhhhhmm [long pause] Um I guess, one thing is our leaders, I
know a lot of people actually, I know quite a few people who didn't
enjoy trek in my group that were really quite negative all the time,
and um I just think that both our leaders were hadn't done trek
before and they were older and um they didn't like each other
[laughs] _ oh OK _ and um all the other groups had very young
like people who had just matriculated or their water polo coach or,
and they would always write to us telling us stories like um their,
like how fun their leaders were and how much they were like
sisters to them, ... and our leaders like I really think if we had, if
they had just gotten closer to us we would have had such a better
time, because a lot of people like they would get sick, and then
they'd just be crying we'd be like no you must go talk to a leader
and they'd be like no I just feel like I can't talk to them ... so you
kind of felt that you couldn't really connect with your leaders ... yeah,
towards the end they started to, but they really didn't have
much to do with us. ... Mmmm, like just the whole time like they
wouldn't really walk with each other and they wouldn't talk and
they'd just stay apart and you could tell that they just didn't _ how
did that impact on you, what it make you feel? Well I just thought
if they’re not trying with each other then they’re not trying with us and they’re not really, trying to become really close with everyone, making an effort to have a special bond with everyone” (AS5BF)

“Well, um, after the first few days I, was like, I still thought it was all formal and everything, cause, um yeah and then towards like after the first three four days I started to realise we weren’t being watched, from the leaders they were just there to help us if we got in danger, so I could do > whatever [exhales] < I don’t know. OK, so it seems like your saying that, there wasn’t this sort of presence of teachers and things like that watching you and telling you how to behave is that right? Yeah well, yeah they > they didn’t but, some leaders they didn’t like the swearing but our leaders were pretty cool with that because we could swear as much as we wanted, which was pretty cool I’m not going to lie, and um, they were just there to like, make us carry food and to help us in the last few minutes if we gonna die or something … [laughs] OK … that’s all they were there for” (SW2CM)

The programme is a central theme of discussion at the school for much of the year. As such participants enter the programme with tremendous expectations. The participant responses that characterise this conception seem to suggest expectations that the programme would be lots of fun, and that learning would somehow also take place. However, elements of their experience that are focused on, such as the length of the hikes, physical exertion, and injury conflict with these expectations and participants experience a sense of betrayal and confusion. Such reactions are not uncommon as participants enter a new environment, without their usual comforts and sources of support, and need to adapt to a new social climate and negotiate new social norms and roles (Fabrizio & Neill, 2005; Tuckman & Jensen, 1977; Winkelman, 1994). It is at this point that positive group interactions and supportive adults would help participants make meaning of their experiences, and try and shape both their perceptions of the programme, and the motivation to create meaningful experiences. Failure to do this, results in a view of the programme as something that has to be
endured, and an inability to frame the programme as anything more than a great physical trial. While most participants with such a view will tend not to enjoy the programme, some may find the activities intrinsically enjoyable and value the opportunity to be free of adult supervision. The latter experience is more prevalent among males, whereas the females are more likely to be deeply impacted by the loss of supportive relations and having to engage in physical activities they generally don't like doing in any case (Bruyere, 2002). This is consistent with literature that suggests that males tend to engage in physical activity as a means of developing status and demonstrating their masculinity, whereas females are more likely to engage in physical activity because of the close friendships and intimate connections it facilitates (Gleeson et al., 2008). Despite a generally negative view of the programme, participants who focus on the physical aspect of the programme, do experience some benefits from the programme, although these too tend to be viewed from a physical perspective. The main outcome participants focus on within this conception is the physical strength, fitness, and stamina that they have developed as a result of completing the programme. As a result participants feel they look better, are healthier, and are more willing to give sports another try. Perceiving oneself as stronger, leaner, and more healthy is also likely to positively influence confidence and self concept.

Participants reported their growth in the following ways:

“I’m fitter. You’re fitter. Yes um I’m, not quite as stick figure like as I was before, I was very thin, quite pale and now I just feel and look healthier which I am very happy about. OK, so that's something positive for you ... yes, I’m probably not going to keep up the physical thing I'm not going to ride a bike up the side of a mountain for fun I'm not going to go to the gym but I won't almost shrug away from sports as I have before, I'll try a little harder now” (JP5BF)

“Um, well because we walked so much, I, I think I've gained like a
fitness level, that's like the whole walking thing doesn't affect me any more. In the beginning it was bad because my bag was heavy and it was far to walk but afterwards you just started adjusting and it was normal. So the walking didn't affect you because you were fit so you didn't get tired, your bag started feeling lighter and lighter because you started building muscle you wouldn't build before. So I think what, what I got back from trek was I'm just fitter in general, like, and I'm fit in a different way than you would normally be, because norm..., you sum..., you can play, you can work out you can play tennis or something and then you get strong, but like walking and hiking gives you like endurance, so I feel like I can accomplish more. Oh, OK, so you feel like now you can actually go for the long haul whereas before you wouldn't be able to _ yeah, mmm, _ how do you think that relates to other aspects of your life? Uff, well yeah, now that I'm fitter, I'll, I think I'll be able to do sports better because I don't really enjoy sport that much, but I think now that I've gained this fitness level I'll be able to like participate better and participate more and be able to give more to the team, I will be able to enjoy it more because I won't be as tired, so yeah.” (TS0AM)

In addition to physical growth, participants also perceived changes in appreciation they feel for their families and basic things they have that would normally be taken for granted. Participants were acutely aware of their separation from the luxuries and comforts of home while enduring hot and cold weather, sleeping on a mattress they have to carry, and having to cook their own food and wash their own clothes. As a result they develop a profound sense of appreciation and gratitude for all of the basic amenities and necessities that they have in abundance at home. At the same time, after having to experience these physical challenges without the direct support and daily provision of their parents, the participants often realise they have taken their families, and all they do for them, for granted. Examples of excerpts that demonstrate this strong sense of appreciation for family and basic amenities include:

“Well like my appreciation is unbelievable [smiling] like I can't
even describe like, you don't realise how much you take things for granted, on trek like it's, you I mean to be able to turn on a light and have the whole room light up like that in itself is amazing, like and then your parents and I think like these days like people, > teenagers they don't really appreciate things that much, but when you go on trek < like everything just goes out the window _ mmm _ and you don't have anything, like you have your headlamp and your cooker and 18 girls, and then like that's it, and you have a tent and like it's just, you just learn like this massive appreciation for everything _ mmm _ cause like some people don't have it and then like you just realise how tough life is without those things. [Deep breath]” (SR1FF)

“Um, you just, I learnt to, that you shouldn't take stuff for granted because at home I have a playstation I have a TV I have a nice bed, but there's lots of other people that don't actually have that and they can't look forward to it, so what people in my group and I learnt is that we need to appreciate the things we have and we shouldn't take things for granted and that the stuff we have we have nice food and on trek the food is pretty average, um and that when you get home you know that there is nice food looking, like waiting there for you but other people they don't have that, so you learn to appreciate what you have, a lot. So that's the main thing that you, that, that you've taken, is that appreciation _ yeah appreciation, and appreciating to be with your family, and having your friends there and, having your close friends because there not always gonna be there for you, and yeah” (TS0AM)

“and not having a TV, or a mom to go and hug every when your sad all those little things that mean a lot to you everyday but you take for granted and then when you there you don't have. OK, so for you what did all those things mean what did it mean for you to be, without luxuries food eating food you didn't really like _ [laughing] it really taught me to appreciate things and I know everyone says that but it really teaches you to, like respect and everything your parents do for you and, the little things they mean so much and you don't realise it once you just, if you at home you don't realise it but when you don't have them then you realise how much they actually mean” (PR1FF)

Within this conception there is an overt focus on the enormity of the physical challenges that are encountered during the programme, they constitute the theme. Participants will talk about the incredible distances covered, the steepness of accents, the temperature and flow of rivers to be crossed, and presence of incelement weather.
Having overcome these challenges does bring about a tremendous sense of achievement. Participants are aware of doing something really difficult and feel a sense of pride and achievement at having completed the programme. For example, participants would say:

“because, and I I did cry on the one day at [pause] that [names of places] day it was the 19 k hike I did cry because I felt so proud of myself I even had a, ingrown toenail still have one now, and that was physical and my foot as well and yeah it was _ it must have been painful in your shoe yeah _ it was pain in my leg my knee my toes, and it was, yeah I it was really nice to see how I could push through, make it there. People would say oh my gosh my where's the hut we sleeping there tonight and just a few more steps and yeah we'd _ and then you made it through _ and then you made it yeah it was nice” (HP9HF)

“OK while I was doing it I was hoping it would go by as quickly as possible so we can get to camp and just relax like especially on the fourth day on the [name of mountain], like you just wanted to get it done with and just you want it to be finished, and now thinking back you wouldn't mind being there again just feeling the same stuff over again, even though it wasn't exactly pleasant but it's nice I don't know it's almost exiting thinking that, you know that your gonna eventually get over and yeah so when you get over it's quite like a good feeling ... and also when we got to the top of the [mountain name] looking back we could see the road we did from the school back onto the [mountain name], and yeah it's, like it gives you a good feeling of satisfaction and stuff like I said earlier _ yeah _ and just yeah being able to look back on what you've done and be proud of what you've done. Yeah” (WT3EM)

Although this is classified as the least powerful way of experiencing the adventure programme, it must be noted that the outcomes may still justify the outcomes for most participants – even if the sentiments of participants fail to reflect an awareness of this worth. Physical exercise, as attested to by some participants, has a direct influence on physical health and body image (Carek et al., 2011; Scully et al., 1998). In addition, the majority of participants that expressed these views also indicated that they previously avoided physical activity, but were now more willing to
become involved in sporting activities. This is a significant outcome as most South African youth who stop doing sports by the 9th grade are unlikely to start up again (Tibbits et al., 2008).

5.2.2. School Initiation / Rites of Passage

This conception of the programme is more complex than the previous one. Participants did discuss the physical challenges of the programme, but also focused on the emotional challenges that form part of the programme, their social experiences, and framed their descriptions within the context of their status within the school as a result of completing the programme. Participants discuss the programme as a rite of passage into the school, and more specifically, into the role of seniors within the institution. It is viewed as a test or challenge, something that allows them to prove their worth, which leaves them with a great sense of achievement upon completion of the programme. Within this conception, participants focus on how the programme allows them to develop confidence, perseverance, greater self-awareness, and allows them to make close friends with people in their grade they would generally not get a chance to interact with – all of which prepares them for the next stage in their school development. Excerpts from the transcripts that illustrate these views include:

“Um well, it's a it's a very tough physical journey, but also emotional. For me it was more physical than emotional but for others in our group it was more emotional than physical _ OK _ which was quite interesting, but I I do find that it's almost like um the, the coming of age of our our school, which I think is really nice because you feel like you've earned a place in um the senior part of the school. And um yeah. So tell me a little bit more about that how how is it that you felt for you that it was this sort of
coming of age experience? Well it feels it feels um, it feels really it feels like you've accomplished something, like uhmm, it's hard to explain um, like, in other schools they have initiation and whatever I feel like that I don't I don't really think that that's right, I feel something like this is more, you know more like you've achieved it rather than, rather than having the seniors, make you feel, inferior” (CA7DF)

“Well it's definitely it's an initiation kind of thing for for [school name] _ OK _ and ah obviously I would tell them what what it is, 27 day hike basically from [school name] to [name of place] and that it's supposed to be like, um, the [?? t l ??] students from [school name] and help them to become seniors from juniors to seniors and yeah. Basically it's an initiation kind of thing _ OK, what do you mean by initiation? Well like in there's no like initiation you know in grade 8 and stuff like you know usual schools yeah like a new boys test or something, we didn't I didn't I didn't do that when I came here I think it's like, it like makes you feel more part of the school, when you get to so when you get to grade 10 you feel like you've done something to you deserve to be a senior you've done something to become a senior _ OK so for you a lot of what trek is is it's about getting you into this position of being a senior in the school _ < yeah also to help mature you I think, > um I think you mature on trek.” (MU3EM)

Because it is such as strong part of the school culture, most participants buy into the programme and see it as a necessity. They describe their experiences of the physically demanding aspects of the programme, and juxtapose these with descriptions of the enjoyable interactions and experiences that they had. In this sense, the physical difficulty of the programme is something that needs to be endured to earn the right to be a senior, but the fun that can be experienced is what makes it a tolerable experience at the least, or at best a thoroughly enjoyable break from other school activities doing things that are seen as exiting and unique. This perception is common among school based programmes, which very often significantly improve school adjustment among adolescents (Crisp & Hinch, 2004). Within this conception of the programme the physical and emotional trials of the programme are perceived as
something happening to the participants, a part of the programme that they need to surmount, as quickly as possible, so that they can enjoy the fun parts of the programme, which hold the most value to them. In addition, participants are not as passive as with the previous conception, they realise that they need to play a role in making the most of their experience, they need to make the programme as fun as possible in order to get the most out of it. Illustrations of this juxtaposition between physical and emotional trials on the one hand, and enjoyment of relaxation or social interactions on the other include:

“It was day 7 I think, we had to cross a very, like it was a very strong river _ OK _ and then it spread out into a whole lot of little streams, and we decided to go down to the bottom and cross all the little streams instead of the big river. And it was freezing cold windy and raining [pause] and our boots like just the water just got in our boots and then we just it was, like we didn't know what to do, so then we just decided lets just do it and have fun, so we were like chucking bags over the rivers and carrying people [laughing] and doing all that fun stuff _ so so it seems like it was a difficult situation but it sounds like in the end you guys were making the most of it _ yeah _ so what were you thinking what were you feeling about at that time? I was just like, lets just make the most of crossing this river and have fun _ yeah _ and then yeah we did in 2 hours [smiling] which was very bad they said, but we just had a lot of fun and carrying people and getting rocks into water to make bridges and doing all of that. ” (MI4GM)

“and how were you feeling what were you thinking? Uhhmm, I was thinking about what the rest of the trek entails _ OK _ and what we were going to do _ and what were some of the things that you were thinking about _ because I heard that we were going to go paddling down the [name of river] _ OK _ which sounded cool and we were going to cycle more _ OK so you were looking forward to that _ yeah to that aspect of trek _ and cycling _ and cycling was also really cool I enjoyed the cycling and paddling course” (NT2CM)

“Uhhh, [long pause] well. I just liked, I just liked being with the group and doing stuff together like, if we rowed and stuff we would like we wouldn't take it so seriously like we have to get there at this time and this time, we would just relax and enjoy the day that we had and we took it one day at a time. The rowing was fun for me
and we would just splash each other and like jump in the water and like some other groups they just like thy just wanted to get to the camp site and we were just like no just chill and take it easy, just enjoy the day. Yeah, so for you, am I getting you right, you're saying that there were no real activities that you that you found really meaningful or that that really carried a lot of significance for you _ yeah _ what carried significance for you was being able to interact with your peers and just have fun _ yeah, that was for me the better part, yeah” (PF5BF)

Descriptions within this conception do not focus on the physically challenging aspects of the programme, instead when discussing the trying aspects of the programme participants would rather talk about what they called the mental and emotional aspects of the programme. Participants described encountering numerous emotional struggles such as missing family, the comforts of home, or simply being hungry or tired. Participants also focused on the mental endurance of keeping oneself motivated and moving forward on a long hike. They talked about the concentration needed when making one's way along a steep incline or descending along a ridge. Although participants would be discussing the same days and the same activities as those whose descriptions characterise the gruelling hike conception, these participants did not discuss the bruises, distance, and other aspects of the activities they encountered. Instead they talked about believing that one could complete the task, motivating oneself to keep going, and maintaining focus in order to maintain safety. Examples of utterances illustrating this aspect of the school rite of passage conception include:

“I well I didn't think it was difficult, I thought I thought it would be more difficult than it was and I didn't think that it was actually that difficult at all it was just, it's more mental than physical well for me it was more mental than physical trek was was definitely more mental than physical. So what was some of the things that you were struggling mentally or that were challenging _ well see like um my family I missed my family a lot on trek and and like, solo, being by
yourself and having to like not talking to anybody for that long and just sitting there” (MU3EM)

“I think like one of the girls said trek is a physical challenge disguised as a mental one, no, trek is a mental challenge disguised as a physical one, because like people don't realise they say like wow you have to hike this long you have to cycle this long but people don't realise that it's also like mentally like draining, like you just like, so much is going through your head like, sometimes you'll get irritated with people, sometimes you'll miss home, you'll miss family, you'll miss food like, it's not just a physical” (PF5BF)

“on the [mountain name] if we if our foot slipped out we'd fall down we'd roll down a mountain that sort of thing, on the [name] river going down a rapid if you put a paddle wrong you get stuck on the rocks so you gotta always keep thinking and stuff like that _ OK so it's actually the physical things you were doing were also challenging you mentally _ the physical thing yeah it was tough obviously but that's not really what, like I'm not physically tired I'm not injured I'm not stiff anything my my head's just, completely dead” (WT3EM)

Within this conception, participants often describe the programme as an initiation rite presented by the school. They understand that the programme is meant to help them develop, mostly by presenting them with challenging situations that they have to overcome in order to prove themselves, and so that they can grow as a result. As a result, they describe their experiences as something that needs to be done, almost like a test, with the goal being completing the challenges. The challenges are not meaningful experiences in and of themselves, rather they are a means to an ends. They provide content for exciting stories, and allow participants to cast themselves in the role of conqueror. The experience of this new identity is often fortifying for youth (Kimball & Bacon, 1993). When faced with physical and emotional challenges on the programme, participants describe thinking of them as something they can tell others about, most notably, as part of what they see to be the main discourse at school for the
coming year. This provides both the motivation for engaging in the programme, as well as shaping the depth of the experience for the participants. The adventure programme becomes something physically tough, exceptional, emotional, and also fun that they did and can talk about with peers at school, as well as giving them a new social standing amongst their peers and community. Examples of excerpts illustrating this perception include:

“Well, yeah they weren’t there were some really easy days with really short hikes no big uphills no big downhills just flat easy, and then on those hikes we'd just, well we'd kind of leave the previous camp late and enjoy what we had there and then, get through the hike as quickly as possible to get to the next one and have a long time there just relax _ OK _ yeah almost use it as a day to rest and just get through the hike which is short as quickly as possible and then just enjoy the camp site relaxation (WT3EM)

“Like cycling for 60 kilometres, or walking for 9 hours a day, normally I wouldn't do that, like I'm really lazy. Like at home if my mom says go clean up your room, I like yeah sure, and then I end up not doing it. But you kind of want to do it, you wanna push yourself that when you finished trek your like well I've walked almost 400 kilometres and cycled and paddled. It's, no you, you do stuff you normally wouldn't do at home, you try, try new things, you, like I I don't like walking, it's a mission [smiles] but when you, when you're there you just wanna do it so that you can say that you have done it and that [pause] yeah. So what makes you wanna do it? It's, it's just, like, because everyone has done trek, and all the older kids are always like, yeah no trek is such a good experience and when you finish it you don't want to get off it, but while you're on it you just like ah I just wanna go home” (TS0AM)

“Like, at times you'd be like ahh I just wanna go home now I just want a hot shower, but at times it was you think, OK you get home one of the days you gonna talk about first it's gonna be the tough days so if you get through this you got something to talk about and, one of the tough days yeah _ yeah, so it's almost like you know like look if I can get through this I know I've got something to _ yeah _ you know something that I've achieved that I can share _ yeah” (GE3EM)
A significant difference between this and the gruelling hike conception of the programme, is the sense of motivation participants feel. There is less focus on the programme as being compulsory, something that they begrudgingly have to do, and more description of the incentivation to complete the programme so that participants have a story to tell, but also because it integrates them into the school. The role that the programme plays in forming unity within the grade, and providing the participant with entry into this social network is focal in awareness. This perception re-frames experiences, they are no longer seen as these painful, long, and pointless activities, but rather are something that gives participants entry into the school, the social networks of their grade, and their own unique programme group. This motivates students to look beyond the physical activity, and focus on the friendships they are forming and trying to have as much fun during the programme as is possible. Illustrations of this aspect of the school initiation conception include:

“Hmm, definitely. Cause yeah, I’d, I don’t know how I’d live without them they so great, but um, I think, the one girl [name] she’s leaving school this year this was her last year, so then she didn’t really like make an effort to stay positive and everything cause she’s like yeah I’m leaving anyway, and um, then I think like just she has to go off now to a whole different people and I think that if you didn’t do trek that would be the same with you, because everyone’s kind of close they’ve all shared memories and everything and you haven’t done any of that, and so if I didn’t do trek I’d feel very left out and isolated” (AS5BF)

“and I had the option of do I want to do trek or do I not want to do trek and at first I thought OK no I’ll finish the year do the exams, finish off whatever I have to do at [previous school] and end of the year and then go to [school] next year in grade 10 _ yeah _ and then eventually people people here at [school] kept saying no you got to do it it’s great it’s great it’ll make you feel part of the school much more easily and stuff and now I’m really happy that I’ve done it _ yeah OK _ cause I actually didn’t want to do it _ yeah _ at first because I didn’t really know what was going on I thought it
It is very likely that having fun as a focal aspect of participant's experience influenced the kinds of interactions that participants engaged in, and the extent to which they were able to meaningfully reflect on their experiences, or extract lessons from the challenges that were faced. Generally, being fun results in greater intrinsic reward from participation, may motivate engagement, and even positive subjective experiences of the programme, but without good facilitation and processing, is not likely to result in sustained changes (Pace, 2003). It was evident that participants focused on this aspect as there was a clear tendency for participants to characterise experiences as either enjoyable or not. For example, utterances from participants who disliked sport, and were generally not in a good physical condition, were overrepresented in the gruelling hike category of description. On the other hand, the school initiation conception of the programme was generally overrepresented with statements from participants that were actively engaged in physical activity, had high levels of fitness, and therefore experienced less physical challenge from the programme. At the same time, because their focus was on having a good time, emotional conflicts and social learning were more likely to be overlooked, whereas the uniqueness of their experiences, and activities experienced as enjoyable or doing things they were unlikely to experience again occupied the focus of their awareness.
and descriptions. Examples of utterances providing support for this interpretation include:

“and um, I would say it's a lot of fun but that just depends on who you are like I found it to be a lot of fun OK why does it depend on who you are? Like well for me I found it easy cause, I didn't never really got tired I didn't get injured and I didn't really struggle OK so like I have heard stories where some people they hated it because, they were tired their backs were sore from the backpack and, they they say they hated it and they would never do it again yeah I will easily do another month on trek” (QR3EM)

“[Long pause] Uhm, ugh, [pause] To do something other people would never do. And [pause] um [Long Pause] Juss I don't know, < Just to enjoy and have fun” (FN0AM)

“Well I, you never gonna do trek again, and you probably won't go back to any of the places where we were on trek, so it's nice to know that OK I did this, I was, I was on this swing here at this place, and you know I, even though I was tired or I was it was like cold I didn't want to get into the water or whatever I still did it because, you know I would never do it again! And I mean doing one thing, and then, now it's, if it sucks now when you think about back later you gonna be like well I'm happy I did it because you know now I'm actually happy about it; so you know just taking every opportunity to do things that you won't ever be able to do again, and to see things that you won't ever be able to see again, so yeah, that was one of the things that was quite nice for me” (PD0AM)

While the school discourse and characterisation of the adventure programme did add a sense of motivation and provide meaning to the programme experiences for some participants, for some participants it also resulted in disillusionment and frustration. This represents a perspective of the programme as being packaged, predictable, and having a clear progression and outcome. Participants expected the programme to be lots of fun, to have meaningful and enjoyable social interactions, and to ensure they grow and develop into seniors of the school with greater
confidence, maturity, and social skills. When activities or events are encountered that failed to live up to this, most participants responded with the decision to make the programme enjoyable. However, this is a uni-dimensional response and view of the programme, participants failed to look at how they would respond to making interactions more meaningful, or how they could learn and develop from their experiences. Their descriptions suggest that they failed to see the value in emotional trials, become vulnerable or intimate in social interactions, and become aware of the distinctiveness of the context. Participants were more likely to be protective of school social hierarchies, replicate patterns of interaction, and simply see the adventure programme as an extension of their schooling, as another school camp. This influenced their view of the lifespan of changes taking place in the programme. If typical social interactions characteristic of the school context were often perceived, and brief emotional or social trials were overshadowed by lazing around or having fun, participants tended to see the outcomes as being transient or not that impacting. Examples of utterances that fit within this framework include:

“as soon as we met up with the guys everything sort of went back to the same way that it was at school. Sort of, why are you hanging out with that freak, or what, like oh you talk to her now or oh my gosh what's she like, and [pause] everything that I felt was built for those first 8 days, that was starting to get there, immediately shattered and by day 9 we had to start from scratch again ... I'm always going to hold on to the people I got to know on trek but if the situation changes at school I'm going to just treat it like used to just sort of block it out ignore it. And I mean I'm not going to be uber close, it's not going to break down the almost hierarchy of our school, were not all going to sit together in a gigantic circle and have huge happy bonding time, we're probably going to go off into our little cliques and just stay that way” (JP5BF)

“Well um it was only really the first rest day but we got there and then um meet up with the girls, and then they had to do activities
for their rest day so then the next day was our rest day. And you had to build a raft and you had to get everyone onto the raft and cook tea for the leaders and then there was prepare the bikes and like everyone just kinda wanted to relax no one really wanted to build a raft and get onto it because we do that at every other camp” (VY2CM)

“I came into trek very, this is what my perspective of trek was, and it wasn't, and then in the last few days I was like I said to myself especially after solo I said to myself that, they said so < everything was going to get better after day 6 and then it didn't, and then they were like it gets even better after solo, and then it didn't, so I was like don't rely on what other people said about trek make it your own. > So, um yeah I after solo I was a little more open minded to things coming at the group and not expecting what other people had told me from the situation” (SO5BF)

Another important aspect of participant's perceptions that contributed to the conception of the adventure programme being a school rites of passage programme is the experience of the adult leaders as fitting into disciplinarian, teacher, or authoritarian roles. Participants were aware that accompanying adults were not expected to fulfil their typical school roles while on the programme. However, many utterances suggested that participants viewed the adult leaders as fitting with traditions adult roles, as would be traditionally experienced within the schooling system. They perceived a clear hierarchy between themselves and the adults, suggested that adults exercised arbitrary authority over them by making them carry their food or do other menial tasks, and had access to resources and privileges that were being denied to the participants. One of the functions of the leaders particularly aversive to the participants, was that of disciplinarian. Adolescents are often found to experience difficulty in relating with adults in authority positions (Hill, 2007). On the other hand, others may simply conform to such authority, but fail to internally question or develop their own principles for pro-social behaviour (Hoyer, 2004). By
enacting power relations and different forms of arbitrary authority to instil order or punish deviant behaviour, the leaders created a context in which participants failed to see the natural consequences of their actions, question or discuss group norms and values, and instead focused on these power relations and how they affected their enjoyment of the programme. Examples of utterances illustrating such perspectives of the adult's roles include:

“um no our leaders weren't amazing which I know that the girls that had really nice leaders enjoyed it a lot more and I think that a leader can make or break it. In what way were your leaders not amazing, what would you have wanted them to be? Um, both of them hadn't done trek before so it would have been nice if someone had experience, so they both went in blind with a whole group of 16 girls, so it was a little annoying that they didn't know they knew exactly what we knew, which was frustrating at times because we didn't know how far we were we weren't to sure what was the best place we got lost a few times because they didn't know themselves, um they also were very controlling, they said that they were just accompanying adults but they did a lot more than what they said they would, which was frustrating for the group. So how did it make you feel, give me an example of something that they did and how you felt about that _ um they, like we got um like treats on our rest day and they took it away from us because they said that we didn't clean up our camp site, but our camp site was impeccable compared to the boys like it's actually ridiculous and then they still take it away from us, we were so upset with them, then they took our cokes away and they said we had to earn it back I mean you don't that's controlling, it's not there for supervision kind of thing so they did step in a lot which was frustrating” (SO5BF)

“a lot of people were stealing food and, on the last day of trek that was, we sat in a hall for like 2 hours, quiet, in complete quietness until, um they admitted who it was our leaders, that was like the worst part of trek for me _ is it _ it ended with such a bitter taste < one of the, well a couple of guys stole food from the leaders, thing and he just said, he started laugh our leader started laughing out he said he's like, I'm the most patient guy here, I can sit here all day and do it and, it just really left a sour taste in my mouth like ... um but the punishment really was, it wasn't a punishment for the people that did it _ yeah _ and that just made me really angry, that they could get away with doing something, this [name] leader said
“well it was pretty lame that we had to carry their food and whenever there it said once on the map, you are going to sleep in a hut. And then when we got to the hut we couldn't sleep there cause the leaders were sleeping in the hut which was pretty lame, and we all got exited, and then we were all put down, because, they were, and they had privileges which is pretty lame, like they could shower first and then if you showered first you would get in trouble, which is pretty lame. And the fact that they get, um everything else, they allowed to do everything we can't do, like they could go to the shops, they could, sleep in huts when we had to sleep outside _ how did that make you feel _ well [pause] it's quite, frustrating cause the one day we got lost, and it was almost [pause] sunset so it was almost dark and we were all pissed off from hiking the whole day, getting lost [pause] and then even the leaders were pissed off and they like you can't ask questions, but it was quite frustrating cause we didn't know what was going on” (SW2CM)

As a result of completing the programme participants report feeling more confident, independent, and competent to be able to handle the challenges and chores that life brings their way as they progress through school. All the utterances fitting this conception suggests that the school's social dynamic has been disrupted. Participants express feeling that their grade is more united seeing as they have all made friends with many different people that they would not normally have talked to. Their new friendships are perceived as providing a link into established friendship groups at school they were previously excluded from. While most participants feel that the programme has created a new social network space at the school, some are weary of whether existing prejudices and hierarchies between groups will dissolve automatically, and whether isolates will become integrated into the mainstream social networks as a result of the new friendships that have been formed. The formation of these friendships often seems to have taken place in the context of relaxing together
and chatting, having fun together, or simply because of the constant proximity that is part of the programme. In addition, participants reflect on the tremendous sense of accomplishment they feel after having completed a programme that is very important in the life of the school, and is recognised and respected by their friends and community. They see it as an obstacle or test in their school career, and completing it provides a great sense of pride, belonging, and entitlement to be called a senior in the school. Examples of excerpts from the transcriptions demonstrating these perceptions include:

“Uhmmmm, I think that I've learnt to be more independent like do my own thing, I've learnt to do stuff for myself _ like in what way? I don't know, I've learnt a lot about myself I don't know like, I've learnt that I can do such hectic hikes and stuff like that and, uhmm but I don't know hey like I had to do everything myself and I had to wash all my clothes myself I had to pack my bag myself I had to, well we shared a tent so we had to pack up the tent and, we had to cook our own food and usually my mom cooks food so you just have to learn to do stuff yourself” (PF5BF)

“Well, I got my best friend in my group, which was really nice, but um there was a lot of people like two girls that I'd never even spoken to in my life, one was [name] and the other was [name] and they've become like my closest friends on trek, and just people who I never thought I'd, cause it's our grade is like very cliquey _ OK _ and we've never even [pause] _ like talking _ come close to them, talk to them or whatever, and then on trek like I just learnt so much about people and made so many new friends, I literally I everyone was my friend on trek I had such a great time with everyone. So why is it that on trek you were able to talk with those people? I I just, I guess you just share feelings and then you just make a conversation and you just realise stuff you have in common and, I just remember the one day, it was day 21 we were all, we got there very early that day and we were all chilling by this dam like on tubes it was so much fun, and there was a group of us and like my close friends weren't in there and then we just started talking and we sat there talking for like 5 hours, I mean we all just got so close, like it's just, well bonding session” (AS5CF)

“Well it means a lot to me cause it's, it's like the biggest thing I've
ever had to overcome like when I was in grade 3 I did the ... but now trek is the biggest biggest thing and I was really proud, of myself because I'd um defeated so many obstacles and hiking days and, rowing days and, I had literally put myself to the biggest test ever _ mmm _ you know and it was I felt so proud because, um, my family believed in me and, they said you gonna come out so much stronger and everything and it was really nice to know that I completed it and that people were proud of me and that kind of thing” (HP9HF)

5.2.3. Once-in-a-lifetime Group Adventure Programme

A large portion of the utterances expressed by the participants fit within a conception labelled once-in-a-lifetime group adventure programme. Within this conception focus is shifted from having fun on a school programme, to meaningful group interactions that are not merely enjoyable, but are experienced as salient, fostering growth, intimacy, social skills and provide powerful experiences that allow one to become more aware of one's latent strengths and weaknesses. The programme is conceptualised as an adventure embarked upon as a group or team in nature, which is valued as an environment that is physically and socially different to what the participants are used to. The programme is no longer seen as a packaged programme, with clearly defined days and events, rather it is a gestalt of multiple, modest yet powerful experiences and moments that all coalesce to provide a nexus of memories, experiences and feelings that are difficult to verbalise but perceived as significant and empowering. The participants described these adventurous experiences, and salient group interactions, as resulting in personal growth and self-awareness, as well as interpersonal growth. The nature and implications of growth were to a large extent tacit, but participants described their experiences as life changing and helping them to
grow significantly. The participants focus on the memories of feelings, interactions and experiences that they have accumulated over the trek, and these are described as personally meaningful in the sense that they were unique and unlikely to be experienced again, and allowed participants to experience meaningful connections with others and themselves. Examples of utterances illustrating this conception include:

“And it's so hard to explain [interviewer laughing] cause, > yes it's _ why do you think it's so hard to explain it _ well because you kind of have to experience it like, you can't just say to someone, like someone random who hasn't been on trek like yeah it was amazing cause they'll be like yeah 27 days in the bush I mean how, how cool can that be. But like [pause] it's just like you grow on trek and you have to almost experience things like first hand _ mmm _ to really understand what I'm talking about _ OK _ because, like, only me or the person who has been on trek will know what it felt like to um, to conquer that huge mountain or to, um, help someone to see them smiling or to get talked about at debrief and appreciated or to um, cook that food every night or to you know what I mean _ mmm _ so like you really altogether like, you had to, you kind of have to experience it all and put it together to really know” (SR1FF)

“Um, I guess I would say that it's a life experience and something that you will never really be able to do again, getting into nature and getting around with a group of people and cooperating with them for 27 days it really is a once in a lifetime opportunity. So um it's great it's a voyage into what most people would consider the unknown, because most people won't have this nature in their garden so yeah it's great” (VY2CM)

Within this conception, participants were more aware of the cause and effect patterns innate to the social interactions and environment of the programme. These were interpreted from the participant's experiences, and also reinforced through group discussion, particularly during debriefs. Participants describe themselves as having the freedom to choose their own behaviours and norms in a completely novel context,
free from societal rules and arbitrary repercussions enforced by authority figures. Instead, they experienced that each action has its own natural consequences. The value of these natural consequences for shaping values and behaviour is a cornerstone of adventure programming (Gass, 1993a). These experiences led to both implicit and overt norms being defined for the groups. The utterances that make up this conception suggest that participants became aware that the “rules” that govern behaviour at school or home were no longer at play, and that norms and values had to be re-established. At the same time participants expressed having made a choice to garner value from their experiences, they wanted to have fun doing the programme, but they also wanted to take every opportunity that came their way to engage in adventure, do something memorable, or spend time interacting with their group. The descriptions in this conception are contrasted with the school initiation conception, in which having fun was the central motivational theme. The participants talk about making all the activities that they did enjoyable, they wanted to embrace their time on the programme, not simply getting through the difficult parts, and then relaxing or doing things like sports that were perceived as fun. They wanted their experience to be memorable, not just enjoyable, but in the process they found that they could have a lot of fun even during particularly difficult activities or experiences. Examples of transcript extracts demonstrating some of these aspects of this conception include:

“Ok well um, it's great because you have like almost no worries, like you have nice leaders like we did then it's awesome because there's no curfews or anything they, if you wanna stay up they let you stay up if you tired the next morning you learn the hard way. Ah, if you don't brush your teeth then your teeth smell your breath starts to smell so you learn the hard way to brush your teeth ... Um, I think ah it was a great experience it was tough but, it was you know ultimately you can't help but think that it's good for you
though, um there's no there's no times when you want to there's no time when you want to say ag this sucks it's pointless I don't want to do this, there's not one time like that _ OK _ it's always like you want you wanna carry on and it's [?]trying?] it's great it's a good time to bond as well you make lots of friends” (UC3EM)

“OK, but how did you decide that's how the things must be? Well, it was kind of, like you just saw, and it was also like a group thing like we all said OK on the one debrief it was like OK, like we must learn to be like selfless and help each other, and putting others before yourself like it just kind of happened _ OK, so your saying it like just happened was it something that was more implicit, so it wasn't something that was you know really talked about, or was it something that, you know everyone talked about and decided upon together, was it something that each individual did or was it something that was more collective? It was kind of both ... that's when like basically the whole group kind of put in, like, they like said they like shared what they thought of being selfless and how we can improve on that and so it was kind of both > like we all knew . Oh OK, so you it's sort of like you saying you knew just from what you saw and how things were working but then the debriefs also played a role in it _ yeah _ what what played the bigger role or was it the same in terms of the debriefs and just what you saw for yourselves _ I think what we saw for ourselves was the bigger one” (LC1FF)

“yeah you had to make it fun otherwise it wasn't fun, like I some guys just hated trek and just said no this is rubbish I hate it, and some guys were like no you've just got to take all the opportunities and make the most of it ... It was just to see the fun people who were like, get going and do it and then the other people who just didn't just didn't feel like it, and they all just sat on the beach on the side of the dam and watched us, and we were diving off the boat and, trying to tackle and then the leaders were like OK you guys you gotta make a cup of coffee on it, so I grabbed the cooker _ yeah _ and I had the meths and we were going and then a wave came _ oh no! _ the meths and the fire went all over me but I just jumped in the water so it's fine _ ohhh! _ but it made it so much more fun just trying to do something that was impossible” (MI4GM)

Within the once-in-a-lifetime group adventure conception, group interactions, particularly the nature of the group interactions the participants shared was in focal awareness. Adventure based programmes in schools, often make use of the strong
influence of peers to build adaptive and appropriate behaviours (Glass & Shoffner, 2001). The utterances dealing with group interactions suggest that the group context, and the nature of peer exchanges, was a significant aspect of this adventure programme. The participants saw the natural environment, the length of time the group spent together, and the positive interactions they had as a central component of the programme. The participants saw their interactions as significantly different to the kinds of interactions they would generally experience within the school context. They found that they, and the others in their group, had to be genuine in the context of the programme. Spending all day and night together meant you got to really know people, and the exertion of physical activities meant participants did not have the energy needed to maintain the appearances and persona they would adopt at school. Participant's descriptions suggest that they saw the programme as something they needed to do as a group, which created numerous opportunities for interaction at a deeper than surface level. The participants also described formal aspects of the programme, such as the debrief and activities in which people had to answer questions about themselves, that contributed to the opportunity for people to experience themselves and others in an authentic, congruous way. This meant that participants had to face up to differences, could learn to appreciate similarities, and could learn how others experienced and managed their way through the world. Because the programme forced them to really be themselves, the participants became more self-aware and also got to know others for who they really are. This was experienced as significant by the participants, as evident in the following examples:

“and then on trek they just become themselves and you really learn a lot about your friends and new people and yourself _ give me an
example what was something that you learned about someone else? Um like my friends I got a lot more close to them, and just I started to know everything about them _ how does that happen? They just can't put a like a fake face on if you know what I mean they just, have to be themselves all the time they can't always be popular they just have to let it go do what they want to do _ why what is it about trek that that make that you had to like put down that face? I don't know it just, you around you got more confidence so you didn't need a you just got relaxed with everyone _ OK _ and you didn't need to do anything to impress anyone you just could be yourself” (MI4GM)

“I don't know I think that I think that um because both the one day she wasn't in a very good mood and we'd all got to know, like um because at the end of each day we'd our leaders made cards and each person had to answer a card _ OK _ so we got to know each other really well in that sense so I started talking to her about her family and where she'd been and everything like that and, and when you rowing you've got very much a lot of time to, chat and whatever because you not walking so you not getting out of breath you just paddling _ yeah _ which were um um and that left a lot of space for, and also singing and things like that group spirit and that” (CA7DF)

While in the school rites of passage conception participants also placed a lot of emphasis on positive group interactions and making new friends, the way these bonds were formed, and the level to which they are experienced, was described differently. In the previous conception, bonds were formed by having fun together – playing sports or chatting and doing each other's hair. But in this conception, descriptions suggested that relationships formed not only in the context of shared enjoyable experiences, but also from experienced support and encouragement in the midst of shared challenges and emotional trials. This finding echoes that of Phillips-Miller (2002), who found that a strong peer supported group dynamic is one of the core processes supporting effective treatment outcomes in adventure programming. This perceived emotional support is described as creating a sense of trust in which intimate feelings could be discussed, fostering stronger bonds, which then act as a support
structure the next time participants are struggling in the programme in an iterative positively reinforcing cycle. As a result of these bonds, the painful and challenging aspects of the programme are then balanced by the group cohesion and support, making it possible to enjoy activities together, and fostering the conception of an epic group adventure:

“and we just got to know each other like we, we started talking more and telling each other how we feeling and, it just, like it's just a bond that just like happens and then from there on it just becomes so much easier to talk to them and, and, express your feelings and like getting a hug from someone and then you feel so much better and stuff so > yeah and [long pause]” (LC1FF)

“Um, I mean one day we it was day, I think it was day 6 or 7 round about there and, we had an extremely long hike, I think it was 9 hours of hiking and that was along a mountain like the face of a mountain and it just carried on for ages and, people were trying their hardest to get to the camp site, and they didn't take anything in _ OK _ but I was at the back and I was with, one of the adult leaders and I had 2 f well they weren't friend, they weren't my close friends but I got to know them a lot better there, and we made the most, of what we had I mean we had each other and, we, has the like surroundings around us and even though it had been pouring with rain and people were wet, we made the most of our day and other people didn't, and that was just one example of me working with people around me _ OK _ and that, I will never, even though it was probably one of the most boring hikes of trek it's one of the days that I will remember most because I made such a great relationship with a certain individual in the group _ oh OK _ and it was just an amazing day for me” (NF9HF)

“yeah so so tell me how does how does that balance work of, on the one hand it's incredibly demanding physically _ yeah _ and on the other hand you saying it's like the most fun time that you had in your life, so how did how does that work _ it's fun because _ how does it fit together _ it's it's like that because the two balance each other out having the group members, um especially when they especially after a few days when we've bonded as a group it's so nice to have, because they've also hiked as well and then when you've reached the camp site and you just have so much fun and then it's almost like they balance each other out, and there just so many good funny moments and, you make up little things and
there's, little funny side comments on the side and they just balance each other out almost and it's almost the best of both worlds because you almost you are growing physically and then you growing your physically in your friendships as well” (HP9HF)

Because the participants were able to have fun together, experienced the relationships as trustworthy and providing support, the group became a central aspect of the adventure programme experience, and it was often described as a team, or at other times, as having the depth and types of interactions characteristic of a family. The group became an entity that was valued and protected by the participants, the participants were willing to act and make decisions to ensure its optimal functioning and character. Such group cohesiveness is vital for groups to move forward in their development, start to function as a unit using shared norms, and to be able to engage in therapeutic growth (Schoel & Maizell, 2002). For example, participants would often talk about walking faster than what was comfortable for them, or others who could easily have led at the front staying back to help stragglers, in order to ensure that the group could stay and work together. Some of the activities were described as team-building activities, such as crossing the river on tubes, solo, debriefs, and evening question-and-answer sessions. But in general participants relate trying to stay together and the interdependence formed by the experience of group cohesion, in this way all activities had the potential of building teamwork and nurturing the bonds being formed between members. Although some group members were identified with skills particularly valuable in specific situations, such as being able to fix bicycle punctures, all of the group members were seen as being important and needing to contribute to the successful functioning of the group. This too is an important characteristic of good adventure programmes (Gass, 1993a). Participants described
learning the importance of group interdependence both from their experiences, as what was spoken of as an unspoken rule, and through the group discussions that would take place at debriefs. It seems that there was a strong social norm developed in these groups, and that although participants say that people worked together voluntarily, the desire to be part of the group and social pressure to adhere to the established group norms must have played a large role (Weisz & Hawley, 2002). The participants describe their groups as being like a family, not only because of the closeness or intimacy they felt with one another, but also in the sense that people would not be scared to share or express their true feelings to one another, whether good or bad, and because transgressions would be forgiven quickly. Also, just like family, members were not part of the group because you liked them or shared similar interests, as is the case with most friendship circles; everyone had to be accepted simply because they were part of the programme family and were going through so many emotions and powerful experiences together. Examples of the respondents' comments that support this aspect of the once-in-a-lifetime group adventure conception include:

“Um, probably like as a group, um, we all got to know each other really well we're like a family, um, we all refer to it as our family _ mmm _ um [pause] and there's also a little team building thing it's like our group got little dog tags and um _ OK _ so they like, like individually they the guy that like was really stingy and didn't get on with, he's still a part of the group and we're friends as a group but I would never be one on one friends with him again. Um, but it just really, like there's some antisocial people beforehand, they would just sit in the library all break and just, but on trek it really comes out like there opportunities for them to, show them like one guy [name], um he got involved all the time, he took he grabbed trek by the balls” (KP4GM)

“and then that changed the mood because it brought me closer to
my group in a way _ mmm _ and it brought me it gave me the sense
of a family of sisters because it it changed me a lot that day
because it showed me we could get through so much _ mmm _ and
going through the night it showed me so much yeah that changed
me that day it changed me a lot _ wow sounds like a magical
experience _ [laughing] yeah it does it was such a nice day that
day yeah _ it's interesting that you say that you felt like a family,
what is it about a family that you guys that you feel, what are the
characteristics that that make you describe it as family? The love
that just went like it doesn't matter what's going on with you, if
you've got a problem you can go to any one of them you know, it
was it's that it's the love that was brought in for the whole group _
mmm _ like anyone of us if we had any problem we could go to,
any one of us and you could and you know you'd just feel better _
mmm _ and that was the nice thing about it yeah because we now
like other groups we heard that they were separated and, it felt like
we were such a close group like, yeah. I'd say having, the people I
had changed my whole experience on trek. Like, I would never like
I told them before we left, I I'm I'm not, I'm not going to miss trek,
but I'm going to miss you guys because _ OK _ if it wasn't for you
guys trek wouldn't have been the way it was so _ mmm _ that's the
whole if I hadn't had those people I had, trek would have never
been the same. So can I say that the most significant thing for you
from trek was that social group and that sort of feeling as a as a
family _ the bond we had the bond we had, is very tight it's, it's
grown it has grown and grown every single day on trek and _ mmm
_ I don't know right now we feel like sisters in a way yeah”
(IR9HF)

“people that would never normally talk to you um, they would just
talk to you on a complete honest a level like they talk to you face to
face and then in the evenings you'd get there you'd set up tent, you
would see guys who you'd think oh you to cool to cook your own
food or you to cool to put a helmet on for your bicycle _ mmm _
and they would do that and, like every evening everyone would just
get there and just chill just lie around go swimming, play cricket,
like everything was just a jam all day there was just a gees all day
um _ let me check if I'm understanding you right, so what you
would have missed was the realness _ yeah _ or is it the fun and
that that you would have missed? Well I couldn't say that it was an
exhilarating fun um, it was just [pause] it was just being around
people and getting to know them and knowing that these were your
family … it became second nature, like, um, and you just see
everyone else setting up tent and when it's raining you would go
and sit in someone else's tent, and just talk _ mmm _ like, I know
so there was one moment that, we won't repeat when we were all
cold and we had to share showers. Um, it, for guys they would
never normally share a shower with another guy it is ah, it was
Participants describe these intimate, family-like relationships between members of the group, and the kinds of interactions that resulted from their exchanges, contributing to perceived growth in social competence, being given the opportunity to experience better ways of having relationships, and the development of important social skills. Participants describe having to handle a large array of emotions and experiences within the group context. As such the group became not only a vehicle for enjoying the programme, but also a window on one's own and others social behaviour. At one moment a participant may be talking to someone who is depressed and missing home, another group member may be angry because an item of food has gone missing, whereas another is simply astounded by the unfolding wilderness scene before them. In addition, participants report becoming aware of the wide range of approaches group members have to the same social phenomena, and that the same technique may not be applicable in all situations. For example, confronting one group member about hogging food may elicit an apology, whereas another participant responds with denial or defensiveness to the same approach. Being exposed to this wide range of social interactions and approaches allowed participants to grow their expressiveness, assertiveness, active listening, conflict resolution, leadership abilities, and manner of communication. Examples of transcript extracts describing these kinds of insights include:

“it really it you learn a lot about how people respond like when
you're a leader you learn a lot about how people respond if you show them the map and then say I don't know whether to turn left or right what do you guys think or whether, and that might just burst into an argument or whether like just saying no no so they just gonna argue and deciding yourself, like that kind of thing _ so how did you handle that? Um, well I tried both ways” (UC3EM)

“Things that stood out, like you, you often think like that you got like problems, and with other guys, you hear about the problems that they have and you like find that you are not much different to everyone else, and like you stop feeling sorry for yourself, and you might be feeling sick and you think that the worlds against you but then you speak to the guy and he's actually feeling worse and then you think I'm actually not that bad, so like, that also one of the things that stood out ... At the start of trek I, I would get cross with guys but at the end you learn how to handle them, how to calm them down, you know if a guy is being painful you learn how to allow him to get over himself. So give me an example of something that happened _ like if one guy would get cross for no reason, and if you just let him get cross at the start it would just get overboard, if you, and then at the end if a guy would get cross you would just tell him don't be like that, or who do you think you are, and then slowly we just learnt to handle people and towards the end then there's no more fights no more anything because we all would just get on so well” (CH0AM)

“Um, no trek is, trek teaches you how to deal with situations that you normally wouldn't deal with, and um, like um how to deal with different personalities and different people. Uuuhm, yeah. So it seems like for you trek was a lot of learning about people, and how to react in a social environment _ yeah with people, because I don't usually like talking to people that I don't really know. It's hard for me to talk to like random people. But trek made me, like gave me lots of opportunities to make new friends and meet people that I haven't like closely _ [smiling] so it's helping you deal with this now _ < yeah! [both laughing] > no, no, this is fine ... I think now I'll be able to mingle with other kids because I know other people from other groups, because I know them and it won't be as hard because they'll be there. So I have, I'll know, I'll have someone I really know so I won't be as afraid to > mingle with everyone” (TS0AM)

Participant descriptions that fit into this conception of the programme tended to ascribe most learning and significance to their social interactions, while the majority of these were with their peers, there were a number of instances in which
relationships with the leaders were also typified as significant. Rather than being distant, or fitting authoritative roles, adult leaders were described as members of the group. Participants describe positive relations with the leaders in which they could identify with them, had fun together with their leaders, and engaged in the programme together. Leaders were seen as alternating between abdicratic and democratic leadership styles, leaving mundane decisions and problems to the group members but also discussing problems and penalties with the group. This left participants with a sense of responsibility and empowerment, while also making the leaders more approachable. In some instances leaders played an important role in motivating group norms or encouraging specific approaches to the programme, or ways of dealing with problems, but on the whole leaders in this group interacted with group members on an uninstructive level – they were described more as associates than sages. Examples of utterances conveying these ideas include:

“and we all just huddled there together and chatted about it, and we ended up laughing having fun and, like you know. So what was it what, what do you think was the _ it was our group _ deciding thing that, turned it to the good rather than the bad _ the, like the people the stronger people like the motivated people who encourage and help everybody else, our leaders, _ who do you mean by your leaders the the adults that were with you _ the actual accompanying adults _ oh OK. Um, yeah they were a lot of fun _ mmmm _ it really helps if you've got really nice leaders, it makes it a lot more enjoyable. So what was it that you really appreciated about your leaders? They were fun and like they almost had the same interests as us not really but, even though they weren't that well they are quite a bit older than us but like < I know one of them from [sport] and, you can tell them stuff they are very like accepting people yet they did, like not lead our group but they did, um, help us and they didn't yeah, they did guide us along some things like emotionally and they did help a lot of the girls in the group when they were feeling down, > and they were just fun [smiles]” (LS?DF)
“The leaders are there to make sure that things don't get out of hand, but, if there is a problem, if there's an issue, we have to sort it out. They're, they're not there to parent us. If, you know, if one guy is fighting with another guy they're not going to be like, they will talk to him if it gets out of hand, they will say this is not what you do, if you do this you will get your treats taken away you're gonna get sent off trek. But if there is a fight they rely on us to, to sort it out, like they, they not gonna parent us – if like, like on the cycling day my bike pedal fell off, and we were like 10 ks into the thing and I needed a new bike. So I said like won't you come with me, and they were like No! Why do I need to come with you, you can do it yourself. So I had to run back with my bike and get a new bike, and just so, they rely, it's about you, they not there to parent you _ and how did that make you feel though? Like during the time you are like, why can't they just come with us and help us, but I am actually really glad they didn't, because if they came with me on that cycling day I wouldn't have learnt how to fix breaks or change a tyre or all of that. Mmmm. So they not there to parent us they just there to make sure things don't get out of control. Yeah. And I know like some of the girls groups, like their leaders stayed with them all the time, and they had a bed time and all of that, that's not what you want, you know. There, you want to be able to do what you want, and like, first maybe two nights you might think aahh it's so cool to stay up late, but then you do 18k walk and you [smiles] in bed at 7 already anyway. Yeah so no, it's really, the way my leaders led was really good” (CH0AM)

Overall the participant descriptions fitting this conception had a positive view of the programme, they described both the difficult and the pleasant experiences within the framework of a great adventure that they had embarked on as a united, well functioning, family or team. The participants perceived growth in social skills and competence as a result of the powerful experience they had, and left the programme with a feeling of accomplishment at having made it through difficult trials and exiting adventures. Examples of how participants described their sense of accomplishment include:

“Uhmmm, to have accomplished, like, um a milestone in my life type of thing _ OK _ I feel like I've, ticked something off my goals
list or something like that. OK so tell me a little bit more what do you mean by milestone why do you describe it as a milestone? Mmmm [pause] Cause it's something that I've wanted to do since primary school” (LT7DF)

“Um for me it's a huge like, success in my life it's like a huge accomp like a huge accomplishment, um there were so many times where, it was raining and all I wanted to do was go home but you know you literally you had to push through and like, it was like the hardest thing your minds like no I can't do this can't do this but you have to push through and that was really nice for me” (TN1FF)

5.2.4. Multifaceted Learning and Development Opportunity

The last, and most powerful or empowering conception of the adventure programme was one in which participants entered the programme with the expectation that they would be able to grow and learn through the programme, and had clear goals of their own in regard to what they wanted to get out of their experiences. In a sense the participants had individually front-loaded their experience of trek, and were able to identify isomorphic metaphors of their lives in their programme experiences (Schoel & Maizell, 2002) . Utterances within this conception had a stronger focus on the learning and developmental aspects, and opportunities, inherent in the programme activities. More so than in other conceptions participants had decided what the programme would be for them, and were consequently more aware of the learning opportunities around them and conscious of their own growth. Participants characterised learning in a much wider variety of spheres than the previous conceptions. For example, participant responses fitting the multifaceted learning and development opportunity conception talked about intellectual
development. They described learning about problem solving, interesting facts about nature and their country, and information from others in their group. The participants talked about physical development, not only in the sense of becoming stronger and fitter, but also learning skills like cycling and manoeuvring along rapids. They also described emotional growth, becoming more mature, and learning to control their affective responses and work on things like motivation and determination. Another aspect that was mentioned here was growth in terms of life perspective, existential issues, and spirituality. Overall, the utterances within this category captured a lot of the fun, bonding, and intimate social interactions reminiscent of the lower categories of description, but they extended these by categorising the programme as an opportunity for personal, social, emotional, and spiritual growth. They were more likely to engage in reflection on their experience, and see the programme as an opportunity to work on themselves, and a space in which they could establish their identity. Examples of excerpts illustrating this conception include:

“OK, well I would say it's like a programme that, our age go on that to learn, to be outside of their usual element and to, experience the outdoors and life in a different way without having your luxuries and, whatever you have at home and your parents and close friends it's putting you in somewhere where you not maybe the most comfortable but learning from it and learning how to adapt to different situations and how to learn from it _ OK, what do you mean you saying that it's experiencing life in a different way so how is it different _ by eating horrible food and living, in the bush all the time carrying your life on your back, um, being with the same people every single day, um, and not having a TV, or a mom to go and hug every when your sad all those little things that mean a lot to you everyday but you take for granted” (PR1FF)

“Kind of I do, um, like, I don't know I think it all kind of, it becomes like part of who you are, and it is an experience but, like, you become that person so then, I don't know like it kind of all goes into your character and then you've gotta, it's up to you to, make
that change completely and to really use it, to um, to, uh like [pause] really use it to, do things you know < I don't know like it's all up to you _ OK _ you have to you have to say OK like, like I've come or I, like I really ought to use the things that I've learnt _ mmm _ and you've got to kind of got to change yourself and use trek to change your way of doing things” (SR1FF).

“Well there's all it wasn't a specific situation it's just throughout trek you have to work well for me I just had to work on myself, to make sure that well I could say this but that's negative so I'm just going to keep quite or say something else. So it's there's no real like, along the whole trek it's just a whole opportunity. OK, so for you it was a whole big thing it wasn't specific events that happened that that helped you to work on it it's sort of a goal you set _ yeah _ for yourself and throughout you were able to work on it _ yeah and you would think like you'd say something you'd think no that wasn't nice so I go apologise, and then you would really get like um, then you just near the end we had the leaders talk to us and they'd say what they thought about us and, you could give them permission to like if we said anything negative or if I said anything negative they would say no that was not they would take me aside and say no that wasn't cool, go apologise whatever and I would say yeah I'm fine you can tell me that. You said that was at the end right at the end of the trek _ it was the last like 5 days 7 days or something, like they'd come to each they'd bring each person individually and, tell them the positives and negatives and how they'd grown on trek _ oh OK _ which I thought was great really. So, wou you guys didn't really do that throughout that was something that that, it was sort of a feedback session over the whole trek _ yeah, it was it was just near the end we all had a kind of, then we all came and everyone would have something different to say like there was a, really quite member in our group and he would go there and leaders would probably say, we didn't know what they said but they would probably say like um, well we would like you to contribute more to the group like we think you're a very hard worker but you don't um put your input and give your opinion of what's happening and they like that. I thought well I already know some of my negative traits so lets try work on them immediately. OK. So you actually had that goal going into trek. Yeah. And do you think that trek for you was a space where you can work on the issues that you got? Yeah I think definitely I mean you can't go people already have these prum predecisions and these expectations of you, but when you're on trek everyone starts off new I guess _ Mmm _ everyone, you find out so much new stuff about everyone and, it's just completely great environment to start over” (VY2CM)
Utterances adding to the composition of this conception identified hardships, in addition to social interactions, and guidance from leaders, as important learning opportunities. Although many of the physical and emotional challenges were experienced as unpleasant and pushing the limits of participants' abilities, they were perceived as important learning opportunities, and appreciated in retrospect. To a large extent the descriptions provided by the participants provide support for the combined value of challenges that include high levels perceived risk, push participants to the limits of their abilities, but which are balanced by high levels of perceived social support and appropriately modelled problem-based coping mechanisms (Davis-Berman & Berman, 2008; Newes & Bandoroff, 2004; Ewert & Yoshino, 2008). When engaged in challenging activities like a difficult hike or inclement weather, participants would often learn from positive role models in the group, and endeavoured to adapt their behaviour and attitudes so they could emulate the virtues they admired in others themselves. This is a core tenant of social learning theory (Bandura, 1982). The following excerpts demonstrate the kind of perspectives of the programme, and particularly of trials and hardships within the programme, which are characteristic of the multifaceted learning and development programme conception:

“then I thought well you know you actually can be stronger and you can get through it > and, whatever. OK, if you have to think about the main sort of events or activities or things about trek that were actually carrying the most weight for you, that really helped you the most in in dealing with emo well with learning about the these emotions about growing etcetera, what would you say were the main events or activities things about trek? [pause] Um, definitely solo _ OK _ um, and the cycles, because I set goals for myself on the cycles small little goals like I'm gonna get up every hill today without putting your foot down and stuff like that, um
[pause] and when you've get yeah to the top of the hill and you feel so proud of yourself that you can do it again and like um, so solo and the cycling and, um, definitely the longest hikes it was the toughest days, that we had, definitely _ that you benefited from the most _ ben yeah ... Um basically it makes you realise a whole load of things that you wouldn't know about yourself _ OK _ like for instance you have honestly you just go out of your comfort zone you don't care about anything else, um and you, often at school you have a whole different personality, around trek you can't do that you just can't there's no space for that, you see everyone else's personality basically come out there's no secrets no anything, and you learn to deal with that and you learn to accept things, and basically, it does teach you accepting life as it is. So if there's another mountain that you have to go through as in life if there's another problem that you have to go through you just get on with it and you do it and that's basically what it teaches you to do” (OP9HF)

“Well, for me trek [pause] it was like a very it was like a variety of different emotions, so it's like complicated to say cause each person is different, but I'd say it's it's very hard it pushes you to your limits but in the end you do enjoy it and stuff. And your, without even realising, the little things you've never really thought about in life you can't take for granted because you'll be thinking about them so often and that um yeah you'll learn, you really do learn like something every day whether it's small or big whatever, and it just you basically learn also more about yourself and um you learn about people as well and what it's like for someone else in that sort of situation. And it's just, yeah it's hard but in the end it's just I don't know how to say it, huhh [smiling], and I'm so sorry about my voice on the last on the second last day of trek my voice goes _ no that's OK _ uhhum [clearing throat], but [pause] yeah well it was hard but you do enjoy it, in the end” (EA5BF)

An important element of the descriptions within this conception, which resonates well with the literature, is the role of reflection and processing of the experience (James, 1980; Lord, 2007; Wichmann, 1993). Within this conception, participants spoke significantly more about thinking about the programme, and spending time on their own in thought about the programme, their lives, relationships, future, and character. The solo was particularly important in providing this contemplative space, and group debrief sessions also played a significant role. Often
participants were overwhelmed or preoccupied with the social, emotional or physical aspects of their experience while busy on long hikes, or playing games together, or whatever other activity they were busy with. It was then in these reflective moments that participants were able to give meaning to their experiences, appreciate what had been accomplished, and also become more aware of their own growth and development. This has been referred to as second-order change in the literature (Nicholls, 2004). At some times reflections took place in moments of solitude, at other times this reflection would take on a communal nature, and participants would engage in meaningful and intimate conversations about the programme, themselves, and what they were learning. Participants described this as often taking place at evening debriefs, but at other times it happened spontaneously as participants engaged in their own reflection on their experiences. During debriefs adult leaders were likely to play a role in providing valuable insights for discussion, but group reflection that the adolescent participants engaged in on their own are probably the strongest testament that participants were developing the analytical skills to make meaning of their experiences, and relate them to their own lives. Examples of transcript segments that support the important role reflection had in the accumulation of growth and learning in the programme include:

"you know having that time alone was needed because you with these girls 24/7 everyday, and you just need your time alone to I don't know to think and just to, you know have your own personal little time _ mmm _ and I thought it was a good time it was actually a really nice I I enjoyed it. So what were some of the things that you thought about in that time? I just thought about I don't know I sat down and thought about my life and thought about my future, what I wanted to be one day and where I wanted to go and stuff like that yeah” (IR9HF)
“yeah but yeah like I really enjoyed being alone, and just having time to think and, and, um, realising how I've changed and what trek has done for me” (LC1FF)

“I don't know it was just something like 30 hours by myself and, I don't think I'll ever be, able to spend 30 hours by myself again... not because I don't want to but because, you just won't have the opportunity... and it was just time [pause] well obviously away from your group, so you needed space and everything, < but I could just focus on so many things that I never would have thought of in the past like, I could write letters I could [pause] look at, where I was in the world kind of ... trek just made me realise, kind of how, such small things can have such a huge impact on your life... like family and, you receive a letter from your mom and it's, like [smiling] it's like a chocolate cake has arrived or whatever... and it's just one of those things that you won't learn unless you do trek” (NH9HF)

“Um, I remember talking about like all my other friends like of how how they acted and like, things things like that about them... definitely about the whole family like some people were like very homesick and then you would talk to them about it like they'd be like no but trek is so, like, not nice like they didn't like it at all and then you would try to convince them, and you would end up having this big discussion about it about like what the actual meaning behind the whole of trek is, and then eventually that will evolve, and then like you'd have like this big conversation about it, and then like other friends would come and join and listen and then, it becomes almost like a whole group discussion basically... so so it sounds like you were trying to make meaning out of the experiences you were having in those discussions... (DM4GM)

“I thought it was I thought it was nice to talk about the day and things that maybe um irritated us or the problems in the group... you know um, so those debrief, you definitely need the debriefs on trek, definitely, and um you know just talk about things in the group and maybe things you would like to see happen or things that maybe you didn't agree with or that kind of thing. So it's very open in debrief so you can just really talk what you would like say what you want to say: What were some of the reoccurring things that would come up in debrief? ... like um well it did it did come up a lot on debrief about the [name] a lot because of the things he did, so that was one thing that used to come up a lot, and then uhm so that was quite that was quite a lot of things that we talked about, maybe on trek that helped us, the the that maybe that helped us understand things better, maybe like how we should deal with these problems. Because then the [accompanying adult name]
was very good with telling us he was very insightful about these things and you know telling us like what we should do or you know the problems that could be in the group or something like that, so that was quite nice to learn to understand just what was going on and things like that. OK. So the debrief sessions were actually beneficial in terms of you guys sort of adjusting and knowing what's going on and helping you to plan and decide how to deal with this specific issue _yeah yeah” (PD0AM)

Ringer and Gillis (1995) suggest that existential discussions are the most recondite level of psychological depth to be encountered during processing and reflection discussions. At this level participants contemplate questions regarding ultimate meaning, their place in the world, and grapple with questions of purpose and spirituality. Among the utterances making up the multifaceted learning and development conception there were discussions reported about spirituality and instances in which participants considered answers to existential questions. In addition to reflection about existential meaning, spirituality or religiosity also emerged in other ways. Some participants described conversations between group members in which religiosity was identified as an important belief system, which was seen as something that provided commonalities and bonds between members of the group. Other utterances demonstrated how people would experience the wilderness around them through their religious world-view, or attribute characteristics to nature such as healing, creating a space for introspection, or being experienced as calming. Another way in which religiosity emerged in discussions as something significant for participants was as a sense of support. In such instances participants suggest that they would rely on sources of comfort or strength from within their belief system as a method of coping with the challenges experienced on the adventure programme. Examples of transcript segments mentioning such discussions include:
“Not found myself but I just got to know myself better and a time we had like 30 hours solo, and it just you have just time to think because, you're not you don't have to get to your destiny or destination and, you. Yeah so I just had like I was thinking and you think about your religions and [pause] > I uh I don't know how to explain it. Well tell me about, what were some of the things that you were thinking about religion for example? Um well I was reading, they gave us well they offered us books to read and I'm quite interested in like the planet and that and whatever > and the solar system < so there was a book that said that world would world end in 2012 _OK_ and that really interested me so I read it it was short little thin book _yeah_ um and then I was it had like religious views and whatever but cause I'm indecisive of if I'm a Christian or, or whatever but, um. I, it, I just don't [exhales] ah, um, so then I was just questioning if the world would end and it didn't then really got my mind going um and then I spoke to [name of adult] and he just said that, cause he like not assured me but he said something like, the world can end as much as it will in 2012 as it can tomorrow or in 2050 or whatever so, and then he said something like, it doesn't matter if the world will end if you a Christian because you will always have your relationship with God or whatever, um, but [long pause] yeah I'm still _ so you saying that being on was it trek or was it specifically solo that you spent some time actually thinking about these kind of big issues in your life? Um, I think trek because we had group discussions when things came up and, we, we talked about everyone's religion and what they think and it it a whole lot of different things came up and it made me realise you know what you actually should think about it and see what's happening in your life cause, yeah I'm a very busy person I do a lot of sport a lot of extra outside of school sports and whatever so, quite busy with school and whatever so it gave me a lot of time to, actually think of things I haven't thought of” (LT7DF)

“Uh, found out my other two friends were big Christians, because I'm a really religious person _OK_ a to find out that they are Christians, now that made me really happy. How did that, how did that happen, how did you find that out? Ah, I was in their tent, and I didn't have a tent partner, and a week before I moved in with them, so, then we just talked about it, < I talked about it, and then they told me as well” (FN0AM)

“it was really tough, at times and then spiritually I mean like you out there in the world and you really get to see creation like differently _OK_ you not like in a town and these buildings or anything you just in the nature and you notice birds and animals
all differently like ... you would be in a mountain surrounding the
next day you'll be in farmland surrounding and therefore you got
like to experience the nature on a mountain what it's like on a
mountain then you got to experience nature um nature in a farms
like where there was like little birds and people bugs picking at
fruit and _ mmm_ spraying the vineyards sometimes and then
your; well the last day we were on the beach and then you hear the
waves and, yeah it's just that that's what I mean > differently but I
don't know_ and and what did that do for you? It was definitely
some days it was calming because, or you you really are stressed
out like you you sometimes on those really tough days and all you
you like hearing that calming stream, and it like really calms you
and makes you feel better because, especially if you are in pain
like I was in a few days I was like in a lot of muscle pain _ yeah _
and then it was calming to have birds tweeting and baboons
barking in the distance and, < it was nice because _ OK _ I think
it does calm people” (HP9HF)

“Um, well spiritually I brought a um like a daily Bible with small
daily Bible, that I read everyday every night _ mmmhmm _ and that
was also very nice to have like God with me ... Well I felt in a way
safer like God was there with me protecting me” (NT2CM)

Within this conception, while the group members and their meaningful
interactions continue to be described as an important component contributing to
participants experience of the programme, the adult leaders role is brought more into
focal awareness relative to previous conceptions. Participant descriptions fitting this
conception tended to describe accompanying adults as experienced, knowledgeable
and involved. These descriptions seem to suggest that leaders are perceived as having
both valuable practical knowledge of the programme and skills for negotiating their
passage through the wilderness in safety and relative ease, and the communication
skills, problem-solving ability and personal life-experience that allows them to guide
participants proficiently through their emotional, social and intellectual journeys.
Their descriptions seem to suggest that these leaders meet the basic competencies
suggested by Martin et al (2006). The adults are described as being easy to relate to,
engaging in the programme together with the participants, and modelling appropriate adaptive behaviours. The leaders are described with respect and admiration, largely because of the value that they add to participants' experience of the programme, the emotional and instrumental support they provide, as well as their knowledge and experience. Examples of two interview extracts illustrating this focus on the leaders' contribution to the meaning of the programme arrived at include:

“and then it helps them to look at things differently themselves but also when they telling us things about how, I mean we had um one of our adult leaders has done trek [number] times and just her experience on trek just helped us to look at trek in a way, to, to kind of look at it saying like take it one step at a time and _ mmm_ don't focus on the end point focus on each day by itself and those are lessons that we took, and we took them to heart and everything and, it was just amazing that we could learn so much from them, and not like even when we were just talking we didn't even realise that we were teaching them so much as well ... Um yeah on day the the long hike the 9 hour hike, um I was at the back and obviously everyone was a bit, bleak and everything because it was long, but then um I was at the back and I was with one of the leaders and she said um, the people at the front are focusing on the destination but we wanna try and focus on the journey and everything, and ll like trek is going to be like what you make it _ mmm_ so if you don't make it fun or anything then you aren't going to remember it, the way that some people will and I definitely from that day I took that with me throughout trek”

(NF9HF)

“OK. And what contribution did they have to your experience? Um first well the first thing was that I learned more about people _ mmm_ um I learned a lot from [name] because he had he's had quite a lot of life experiences how, um I heard about how his some of his [personal identifying information removed] _ OK _ and how he said um that taught him so much and his his main like um, life saying would be if you have any regrets in life you still haven't lived _ OK _ and I think that's 100% true _ mmm_ and then [name] um he's just you know I think he's like [age of adult leader] or something and he's just, he's there he will hang out with you, he will be part of the group it's not like you have the 2 leaders on their cell phones talking to friends and family while we will all be here playing cards or whatever they'd
actually join you _ oh OK _ and they would be part of the group and they would be part of trek. So that was important as well that they weren't _ they weren't by themselves or anything _ yeah _ they interacted with the group” (QR3EM)

As with respondents who spoke of appreciation in the other conceptions, participants experienced a high level of appreciation for the luxuries, friends and family that they were separated from for the duration of the adventure programme – almost an entire month. However, the utterances supporting this conception differ qualitatively from the others in the sense that they reflect a transfer of learning from this sense of appreciation. Participants reported not only feeling appreciation for the things that they had missed, but viewed their experience of separation as a life lesson, they transferred these feelings into goals and plans of action based on their learning. For example, participants talked about choosing to become more involved in protecting the environment, not being as wasteful as they had previously been, trying to be more helpful and communicative at home. There was a general trend for statements in this conception to reflect an appreciation of the lessons being learned as valuable for later life, not just in the context of the adventure programme. Participants appreciated that the social skills, perseverance, confidence, and other skills they had developed would be useful to them both at school, and into their future. An example of transference of learning from the programme to other contexts was the conversations participants had during the interview about setting goals. Some of the participants suggested that managing long hikes, and other challenges during the programme, could only be achieved by breaking them down into smaller, achievable goals. These participants then suggested that they could do the same, using examples of studying, exercise, and other activities. How successful the programme participants
will be in carrying out these goals is likely to depend on post-programme protocols that are set up to reinforce the skills that have been learned and once again highlight their importance (Walsh & Russell, 2011). Transcript extracts that illustrate this perspective include:

“and I think that, he made like it made, a huge impact on me because I realised that, I found family so important and I think that that was just a really special moment for me realising how important family was _ family is yeah _ and, yeah I was talking to a friend and I was saying if I could, if I was told I was going to have to do trek again, and I was allowed to bring one thing with me, it would be family _ mmm _ and that just goes to show how important it is to some certain individuals _ so it really sort of helped you to shift your priorities _ exactly, so I mean I went home yesterday and, like I didn't go immediately and look on facebook I lit, I went home and I sat with my mom, I talked with my sister, and we talked about our experiences, it wasn't oh I have to go onto facebook now or anything like that _ yeah _ so it's changed, yeah it's just changed the way you look at things _ mmm _ completely” (NF9HF)

“I improved quite a lot in that sense, because now all of a sudden I start to think more about what I I like plan my day, like I planned my day today what I would do when I wake up, for instance and what I, what would happen in the course of the day, things like that I would plan and I'd be more organised you know ... it teaches you things and like it's good for your mind mental ability and skill, so I thought maybe I should just do that cause that will also help me with my school work, for instance and later in life university and, job. So, things like that, you start thinking for the future and what you could do to improve that future” (BA2CM)

“Um I think your more like willing to do stuff that you don't usually do, like trying new food or, pushing yourself so you achieve a goal, or like you learn that like what I in our group we set goals for ourselves so we went to that point and then we had a break. So like I learnt setting goals can really help and build yourself up slowly, you mustn't set a goal that's like, too far ahead that you'll only reach in like three hours set one that you'll reach in like 20 minutes and then you set another one _ mmmm _ so don't set it too far in advance build up and then you'll get to the like large goal like later on _ yeah so was that something that you learned from specific experience or something just generally on trek? Um,
ah I did know about it before but on trek we did set minor goals and then we got to the big goal hoisting our flag, and so it did help. So it was almost like you knew it before, but now you actually got to do it _yeah and I'll do it like I'll carry on doing it [smiling]” (LS7DF)

Lastly, utterances fitting into this conception suggest that the sense of accomplishment at completing the programme is focused not solely on what had been done, a sense of completing a huge adventure or challenge, but also in how participants had grown and what they had learned. Participants were more likely to describe aspects of their experience, such as getting to the summit of a mountain or crossing a river, as a symbol of their growth and learning during the programme. Such utterances generally convey the sense that participants were able to form isomorphic metaphors that gave meaning to their experiences (Bacon, 1987). An example of an utterance illustrating this is:

“it was a really special moment for me personally because I, felt that, I'd earned something from trek and I had grown as a person on trek _OK _ and that just kind of symbolised how hard I had worked for it _ mmm _ which was really nice and I don't know just as a person in general I've, just learned small things to pass more, easy, and stuff like that. OK, no that's quite interesting so that experience at [name of place] was sort of like an external, a recognition _ of what I'd _ of what you had accomplished _ yeah, yeah on trek” (NF9HF)

5.3. Dimensions of Variation

In this next section the structural relationships between conceptions is more clearly delineated by evaluating the dimensions of variation and themes of expanding
awareness in the data. The dimensions of variation, which could be seen as analogous to mechanisms of change, are seen from a phenomenographical perspective as those aspects of experience critical to distinguishing between emergent categories of description. They are grouped into themes of expanding awareness providing a thread that links tentative categories of description, while at the same time setting them apart based on the different levels of variation expressed within them (Åkerlind, 2005a, 2005b). While the dimensions of variation can be seen as analogous to mechanisms of change, the presence or absence of dimensions does not necessarily correspond with the relative strength or importance of mechanisms. The dimensions of variation reflect the core aspects of experience, as described by participants, that can be used as analytical tools in explaining the structure and relationships between conceptions. For example, the wilderness context has emerged as a key mechanism explaining growth and healing in adventure programming research (Akhurst, 2010; Dawson & Russell, 2012; Ryan et al., 2010). During the phenomenographic analysis of the data in this study, varied descriptions of wilderness did not emerge as one of the factors explaining variation in the experience of the programme. However, the majority of participants did view wilderness as central to the success of the programme. My gut feeling is that should one perform a phenomenological or basic thematic analysis of participants' perceptions of the role of nature contained in the transcripts, that the perceptions of wilderness as a unique context that promotes reflection, changes in personal and group dynamics, and development, as well as a perception of the uplifting and aesthetic properties of nature would be central to participant's experience of nature in the programme. As such, the absence of mechanisms explaining efficacy of adventure programmes, such as wilderness, programme duration, or salutogenic
orientation from the outcome space does not speak to their lack of impact in this programme; but the inclusion of dimensions does speak to different levels of awareness of critical aspects of the programme, that can be used to explain the differences in communicated experience of the programme. There are six major dimensions of variations that were identified in the data that help to understand the hierarchical relationships between the four identified categories of description. These include (a) the overall characterisation of the programme - what do participants say the wilderness experiential programme is; (b) the nature of group interactions and processes; (c) the nature of the interactions and emotional connection participants had with their adult leaders; (d) the quality of experience or depth with which participants engaged with their experiences on the programme; (e) the personal relevance that trials, interactions and accomplishments had for participants; and (f) the type of growth and learning that was perceived to have accrued as a result of the wilderness adventure programme. Each of these dimensions of variations are briefly addressed individually in the subsections that follow.

5.3.1. Characterisation

When asked to broadly explain what the adventure programme is, and what it means for participants, respondents provided an overarching characterisation of the programme. This tended to be a synthesis of their views, and in most instances elicited the elements of the programme that constituted the internal horizon of their conceptions of the programme (Marton & Booth, 1997). At the most basic level, participants focused solely on the physical aspects of the programme such as the
distance, length, or difficulty, or the actual activities engaged in such as hiking, cycling, or rowing. Characterisations at this level tend to be unidimensional, describing the programme as a hike, long walk, or discussing other elements portraying the difficulty of the experience. At higher levels within the outcome space, participants demonstrate an awareness of more critical aspects of the programme, that are simultaneously brought into a thematised state (Marton, 1994; Marton & Booth, 1997). The school rites of passage category of description included participant focus on the physical challenges, while simultaneously linking these with the emotional challenges of homesickness or separation from friends, and the fun times that were experienced, which were all framed within the thematic field of initiation into senior status at the school. At the third level participants focused on a number of properties of the programme, most notably that the experiences, which were perceived as multiple but all combining into a gestalt, are unique and unlikely to be experienced again. The characterisation of the programme at this level assigned the most weight to group or social experiences – the adventure programme was not an individual experience, but was seen to have meaning as a result of engaging in the adventure as a connected team unit. At the highest level, in the multifaceted learning and development category of description the programme was characterised as a learning and developmental opportunity. Participants' descriptions noted physical challenge, emotional turmoil, positive group dynamics, as well as the programme being a mirror on life, all within the framework of learning and identity development.

The findings reported here echo those of Russell (2000) who found that explicit self-identified goals are strongly associated with programme outcome. It is important to note that to a large extent, the conceptualisation of the programme may
be formed prior to the commencement, or during the first few days of the programme. This represents the first stage in the state of dynamic tension suggested by Luckner and Nadler (1997). In order to progress to a place where they can face and surmount challenges, learn from their experiences and transfer this learning to other contexts, they must experience a cooperative environment and have opportunities to process their experience (Nadler, 1993). Unless participants are given opportunities to discern other aspects of the programme, to become aware of the variation in critical features of their experiences, they may fail to reach deeper and more powerful ways of experiencing the programme. This is a crucial lineament of effective educational interventions (Lo, 2012).

5.3.2. Group Process

Peer relations are among the most powerful influences on adolescent identity development and self-concept, with adolescents preferring feedback from peers more so than that of adults (Clarke et al., 2003). In this study, the nature of peer interactions, and the dynamics perceived in each adventure programme group played a pivotal role in distinguishing between qualitatively different types of experience. Although the literature suggests that connectedness may be more important for females than for males, addressing social relationships and developing important interpersonal skills such as effective communication, perspective taking, empathy and social judgement are crucial factors in the healthy development of all adolescents (Weisz & Hawley, 2002). Within the long gruelling school hike category of description, peer interactions were not part of thematic awareness. Some descriptions
of participants not engaged in the programme, attributed to a lack of enjoyment and insufficient desire to make the most of the programme, do suggest that individuals that failed to find meaning in their physical experiences may have been more isolated from meaningful group activities, and were unlikely to experience such dynamics as positive or reinforcing. At the next level within the outcome space, peer relationships are described positively, and come more into focal awareness. Descriptions suggest that peer interactions are important as a means to achieve enjoyment in the programme, but that while peer dynamics allowed for the formation of new friendships they were unlikely to break down the social hierarchies and general patterns of social interaction that dominate the school milieu. Participants describe trying to have fun together by playing sports or other games, spending leisure time together, or engaging in other bonding activities. The interactions described seem to take place at a superficial level, perhaps seldom moving beyond the current task level (Ringer & Gillis, 1995). On the other hand at the next level in the outcome space, the category of once-in-a-lifetime group adventure, group interactions become a central focal point and group dynamics such as social cohesion and group norms become very important in participant's experience of the programme. At this level group interactions are important not only to make the programme fun, but group functioning, intimacy, and unity are valued in and of themselves. Participants describe the group as a family or team, emphasising the import of overcoming challenges together, supporting one another, resolving conflicts quickly, and maintaining social harmony through communication and forgiveness. Relationships are forged through interactions that centre around the encounter level, but do move into the contextual level (Ringer & Gillis, 1995). An important distinction between this level and the
previous one, is that participants become aware of the unique social context, begin to challenge previously held stereotypes and social norms, and recognise that new interpersonal skills and patterns are being developed. At the highest level within the outcome space, group interactions are still important, but adult leaders start to play a greater role in facilitating the formation of group norms and values. Also sporadic entry into the identity formation level of psychological depth in interactions seems to take place, as descriptions of learning from social interactions and change in the way participants see themselves within their social context, and the way they choose to relate to others, are more common. This dimension of variation confirms the important role that group processes and dynamics play in shaping the outcomes of adventure programmes, and highlights the need for adult leaders to facilitate the group development process so that pro-social values can be adopted by the group, and functional communication skills and social behaviours can be learned (Goldenberg & Soule, 2011; Russell, 2005; White & Dinos, 2010).

5.3.3. Outdoor Leader Alliance

Outdoor leaders in this programme are mandated to adopt a supportive and accompanying role in the programme, and not to assert to much power or control over the programme participants, allowing them the opportunity to grow confidence and independence (Wynne, 2012). The way in which adults were able to fulfil this role is perceived differently in the different levels within the outcome space. In the long gruelling hike category adult leaders were perceived as distant and withdrawn. Participants failed to relate to leaders, and could therefore not make use of them to
transcend their focus of awareness in the programme. In addition, participants were more likely to emulate the leaders' separation from the group, and isolated themselves from positively reinforcing interactions, which may have been detrimental to positive group development as a whole. It is vital that adult leaders model positive adaptation to the challenges of the programme, failure to do so may unwittingly provide a negative exemplar of programme engagement. At the school initiation or rites of passage level, adults were seen to fulfil the same role they generally do within the school context, described as higher in status with privileges not afforded to the adolescents, and meting out discipline that was sometimes perceived as ineffective and arbitrary. Adolescents are generally aversive to these adult roles, and are unlikely to have developed high levels of rapport with their leaders (Hill, 2007). At the next level in the outcome space, adult leaders are perceived to be part of the group, accompanying them and sharing in their challenges and leisure experiences. Descriptions fail to note differences in hierarchy or status, and leaders are perceived as part of the group, rather than monitoring it from the outside. As a result, participants reported more positive interactions from their leaders, and were likely to further value group norms such as unity and respect for others. At the highest level, adults were still seen as crucial members of the group, but attributed with experience and wisdom. In this sense, adults were viewed as having authority not because of arbitrary entitlement, but were given this respect by the adolescent because of the positive contribution they gave to the programme experience. When perceived in such a way, adults were able to empower participants to take responsibility for group development, but still play a powerful influence over the group processes without having to assume a leadership position and lead the group from the top. These
findings align well with research suggesting that over half of the variance in psychotherapy is due to therapeutic alliance (Rosenfeld, 2009), and the emphasis placed on leader competencies in adventure programming (Priest & Gass, 2005). Leaders perceived as competent in both hard and soft skills, who model adaptive and pro-social attitudes and behaviours, experience the programme together with the participants by living through the same trials in the same ways, and who actively seek to develop trust, rapport, appropriate disclosure, and facilitate reflection are a necessary condition for adventure programme effectiveness (Harper, 2009; Kimball & Bacon, 1993; Mossman & Goldthorpe, 2004; Newes & Bandoroff, 2004).

5.3.4. Depth of Engagement

Participants were seen to describe their engagement in the programme in qualitatively different ways. To a large extent this appears to be influenced by whether participants were able to ascribe meaning to their experiences, and whether they saw the programme as something compulsory that they had to do, or as an adventure or opportunity that they could shape for themselves. At the first level in the outcome space, participants generally conveyed a sense that they did not want to be there, they were being forced to participate, and expressions indicative of emotions such as resentment and anger were commonplace. At the next level, participants were not simply complying with the requirement to be there, they sought to enjoy the experience by making it fun. While enjoyment may help to foster motivation in the programme, it is not sufficient to ensure growth (Newes & Bandoroff, 2004). By focusing on maximising the time in pleasurable activities, and avoiding or getting
through challenging activities as quickly as possible, participants failed to engage meaningfully and used avoidance as a coping mechanism. Without sufficient psychological exposure to challenges, participants were less likely to need to develop additional, more functional coping mechanisms (MacCann et al., 2011; Neil & Dias, 2011). At the once-in-a-lifetime group adventure level, participants were motivated to engage in the programme in a way that would make it memorable. They described their emotional struggles as powerful experiences, and became more aware of the natural consequences of their actions. One could say that they did not just “do” the programme, they sought to experience it. Participants describe taking every opportunity and savoured experiences with snakes, heights and perceived danger, that would elevate their journey's characterisation as adventure. This motivation to experience something outside of their comfort zone, a supportive group environment, and the presence of challenges allowed participants to experience elements of the programme as peak experiences and self-identify as conquerors (Csikszentmihalyi & Csikszentmihalyi, 1999; Kimball & Bacon, 1993; Mitchell, 1983). Finally, in the multifaceted learning and development opportunity category, participants described their engagement in the programme not only from the perspective of having fun, or experiencing adventure, but valued their experience for the opportunity it provided for learning, development, reflection, and community. Many of the participants set goals regarding their learning, further elevating the quality of their experience. As such they engaged in the programme more holistically. They were aware of the physical difficulties, found resilience in their emotional turmoil, experimented with different strategies in their social interactions, and engaged their intellectual abilities in reflecting on and discussing the meaning of their experiences. This is the kind of
holistic experience that is the goal of adventure programming (Priest & Gass, 1997).

5.3.5. Personal Relevance

The depth of engagement dimension of variation was closely aligned with the personal relevance dimension. Individuals that engage with the programme at a deeper level, are more likely to find personal value from their experience. At the same time, participants that view their experiences as worthwhile and personally relevant, are likely to engage more pro-actively and intently in the programme. At the first level in the outcome space, participants generally conveyed a sense that they are forced to participate, and project very little personal value onto the programme. At the next level, participants also described the programme as compulsory, but activities were more likely to be seen as intrinsically motivating and unlikely to be experienced again, and because there was a motivation to earn the social status of senior in the school, participants were more likely to engage in the programme by trying to make it fun. At this level the opportunity to become part of school discourse and have a story to tell, and the active promotion of the programme, increased the sense of worth the programme had for participants. Participants described the programme as an important test, and experience a great sense of achievement at having completed it. At the once-in-a-lifetime group adventure level, cogency was experienced as more personal than institutional, participants wanted to engage in the programme meaningfully because they saw it as something unique or exceptional. They perceived the programme as being memorable, exotic, an opportunity to get away from mundane social reality, and experience something that very few other would ever get
the chance be part of. Finally, in the multifaceted learning and development opportunity category, participants perceived great value in the programme because of its impact on elements central to their identity, things like their personal values, abilities, and existential meaning. They saw the programme as an opportunity to work on weakness, learn skills that would serve them well in later life, and reinforce their sense of identity and self-awareness. This dimension of variation suggests that the motivation participants have for change, the extent to which they are self-directed, and have clear goals for the programme will play an important role in facilitating learning (Cousin, 2009; Rosenfeld, 2009; Russell, 2000).

### 5.3.6. Perceived Outcomes

The last dimension that can be used to differentiate the categories of description were the perceived outcomes of the programme. Outcomes common to most adventure programmes include improvements to physical health and body image, academic involvement and performance, family relationships, self-concept and related constructs, development of social skills and psychosocial competencies, spiritual or moral development, and reductions in clinical concerns (Bowen & Neill, 2013). Within the first category of description, long gruelling school hike, only physical development and appreciation for family and home commodities were consistently described by participants. At the next level in the outcome space, these outcomes are present as well as improvements in self-efficacy, resilience, and social integration within the school. Participants were also likely to give evidence of increased feelings of affiliation with their school. Within the once-in-a-lifetime group
adventure category, developments in aspects of self-concept and social skills were most consistently noted. Finally in the multifaceted learning and development opportunity category, outcomes also included identity development, testing and refinement of values, spirituality, and a new sense of appreciation for nature. The most notable distinction between this and lower level categories, is that participants were more likely to associate their learning during the programme with goals for transferring their new skills and attitudes to their lives beyond the adventure programme. The self-identified opportunity to engage in authentic exchanges, challenge cherished views and beliefs, and experience the programme as a context in which they could refine their identity is most likely to meet the developmental needs of adolescents (Weisz & Hawley, 2002).

The six dimensions of variation, while presented independently in their own sections above, are interdependent and are most likely to play a significant role at different stages of the programme. Characterisation is most likely to be significant during the pre-affiliation stage, when it is important that participants work through their expectations and anxieties for the programme, and establish a clear vision and goals for their experience (McPhee & Gass, 1993). The dimensions of group process and working alliance are likely to develop together, with leaders that are involved and perceived as capable most likely to succeed at modelling positive group interactions and facilitating the establishment of supportive and empowering group norms (Scheol & Maizell, 2002). The successful experience of these dimensions will most likely facilitate a deeper level of engagement and greater personal relevance, leading to greater awareness of growth and learning in the form of perceived outcomes. Programme instructors should monitor the way participants experience these
dimensions of variation, and use strategies to facilitate more powerful ways of perceiving these critical components of the programme, ensuring the effective accomplishment of the programme goals.
6.1. Introduction

The present study aimed to investigate the qualitative variation in the ways in which a wilderness adventure programme was perceived by a sample of 37 high school participants. Each participant was interviewed regarding their experience of the adventure programme. These transcripts were then analysed using a phenomenographic approach in order to explore the variations in meaning ascribed to shared, salient experiences, across the study sample. A number of salient experiences, or aspects of the programme, were identified that when focused on and simultaneously discerned by individuals in specific ways contributed to the relative effectiveness of the programme. Four different ways in which the programme could be experienced were identified, and arranged hierarchically within the outcome space, as well as six different dimensions of variation. These results have been discussed and motivated in the previous sections. The main findings are summarised below and the implications on adventure programming and future research are suggested.

6.2. Summary of Findings

Although adventure programme participants may enter the same programme, and go through the same activities, they do not have the same experience. In the present study, four distinct ways of experiencing the adventure programme were
identified. In the first category of description, participants experienced the adventure programme as a *long gruelling school hike*. For these participants the physical aspects of their experience occupied their awareness. They tended to focus on the length and difficulty of activities such as hiking or cycling, their separation from family and general comforts, and generally engaged in the programme with resistance. These participants were least likely to ascribe value or meaning to their experiences, and so the perceived outcomes of the programme were restricted to the physical domain. In the second category of description, participants perceived the wilderness experiential programme as a *school initiation or rites of passage programme*. These participants focused on the physical and emotional challenges of the programme, but framed their experiences within a school discourse of the programme, which characterised the programme as a valuable test by which they would earn the status of senior in the school. This provided a motivation for the scholars to make the most of the programme, and so they tended to seek out ways and opportunities to make their experience fun. As a result participants were more likely to gain value from the programme, which included broadening their social circle, feeling more integrated into the school, and feeling that they had developed confidence, independence, and mental strength. At the third level within the outcome space, participants viewed the programme as a *once-in-a-lifetime group adventure programme*. These participants were more aware of the distinctiveness of the programme's physical and social milieu from that experienced at school and home. This allowed them to frame their experiences, both those that were challenging and those that were enjoyable, as part of a great adventure that would be memorable, allowed them to experience themselves, social relationships, and nature in a distilled and heightened manner. The group
dynamics occupied much of the focus of awareness, and because of the potency of peer relationships for adolescents, became the rallying point for facing challenges, experiencing support, and developing social skills. The final category of description, representing the most powerful way in which participants experienced the programme, was as a *multifaceted learning and development opportunity*. Descriptions in this category were more likely to simultaneously address various aspects of the programme including the unique social and physical context and the emotional highs and lows experienced, but were more likely to be aware of the potential for these aspects of the programme to lead to growth and learning.

Participants tended to enter the programme with clear learning or character development goals, engage in reflection and processing of their experiences, and perceive adult leaders as facilitating meaningful engagement in the programme because of their programme knowledge and life experience. As a result these participants were most likely to experience growth and learning that impacted on their character and identity, and be able to identify ways in which they planned to transfer learning to their home environment.

There were six aspects of the programme, which were seen as important in distinguishing between different ways in which the programme could be experienced. These included: (a) the overall characterisation of the programme – how did the participants approach the programme, what do they think the point of this experience is; (b) the nature of group interactions and processes – were interactions perceived as superficial, or was there meaningful interaction, group unity, and refinement of group norms and values; (c) working alliance with accompanying adults – were the adult leaders perceived as withdrawn, fitting teacher roles, or as part of the group,
experienced, and being able to guide and provide counsel; (d) the depth of engagement in the programme – were participants reluctant conscripts, merely trying to have fun, or did they seek to immerse themselves in their experiences and plan to use them as an opportunity for growth; (e) the personal relevance that trials, interactions and accomplishments had for participants – what was participants’ motivation in engaging in the programme, and how holistic was the sphere of influence in the programme perceived to be; and (f) the perceived outcomes of the programme – what kind of growth did participants accrue as a result of the wilderness adventure programme, were they merely fitter and stronger, or had they learned important skills and garnished values and attributes that they could use in later life.

6.3. Conclusions

The wilderness adventure programme that participants in this study took part in is arguably the premium school-based outdoor education programme currently in operation within the Western Cape, and possibly South Africa. All the grade 9 pupils at the school are separated into single-gender groups, chosen to promote the formation of new friendships, and spend 27 days in remote areas of the Western Cape covering approximately 360 kilometres on foot, bicycle and canoe. The participants engage in numerous activities, such as building a raft, discussing readings of various virtues, debriefs, food groups, and a 30 hour solo, aimed at building intra- and inter-personal competencies. All participants are perceived to have gained from the programme – at the least greater physical health and improved body image, or at best a renewed sense of identity, personal values, spirituality, social skills, sense of purpose and resilience
that can be carried through to other activities in these scholars' lives. These outcomes are in line with positive youth development goals and teachable competencies (CASEL, 2003; Nicholson et al., 2004). The demonstrated ability of the programme to foster identity development, and experimentation with various social values and norms, justifies its worth in the school curriculum. Furthermore, if such programmes are able to facilitate the positive development of youth, as has taken place for many of the youth in this programme, these findings suggest greater advocacy for widespread implementation of such programmes, particularly for adolescents in communities with minimal social capital and opportunities (Hendee, 2000).

In terms of adventure programme design, the findings of this study suggest that critical aspects of the programme, such as peer interactions and working alliance, can be perceived differently by the same participants and result in different experiences and outcomes from the same programme. These perceptions are likely to be influenced by both the actual activities, and the way in which these are processed and reflected upon. Phenomenographic theory seems to favour a metaphoric model, in which participant's attention is drawn to critical aspects of the experience through front-loading (Bacon, 1983; Lo, 2012). For example, an adult may require that an insecure participant cross a high traverse on their own. The participants may perceive the leader as withdrawn and disinterested, or as providing them an opportunity to gain confidence and independence. This perception is likely to be influenced by both the manner in which the adult leader communicates their intentions to the participant, and the aspects of the experience that are focused on by the participant. In order for adventure programmes to be effective, participants must be provided with activities that allow them to experience the dimensions of variation or mechanisms of change.
operating within that programme in positive and empowering ways. This study has demonstrated how phenomenography can be used to delineate these critical aspects of participants' experience, and thereby facilitate programme design and implementation.

6.4. Limitations of the Study

The present study suffered from two main limitations. The first is the author's inexperience in conducting phenomenographical research. Phenomenography is a distinct research approach, with its own epistemological assumptions and approaches to analysis. Most researchers are initiated into this approach through a form of apprenticeship – by studying under an experienced phenomenographer. To a large extent I had to learn to do phenomenography on my own through a trial and error approach. By subscribing to phenomenography mailing lists, communicating with phenomenography stalwarts via email, and meeting with an experienced phenomenographer at a nearby university, I was able to get limited feedback and guidance regarding my research. I did my best to familiarise myself with as much literature on the philosophy and application of phenomenography as possible within the time constraints of the study, and diligently studied examples of phenomenographic research in order to develop a grounded understanding of the core principles. However, familiarity and theoretical knowledge are not substitutes for experience and mentorship, and so it must be noted that a seasoned phenomenographer, or a team of critical analysts, would likely have produced a superior research product.

The second limitation of this study is the potential that different phenomena
are studied by including various groups in order to form an understanding of the programme. It is important in phenomenography that the same phenomenon is experienced and described by the various participants in the study. It could be argued that each group could be experiencing a different adventure programme (Bosch, 2007; Sklar, 2005). Group leaders, weather conditions, group interactions, and other important features of the programme are likely to vary from one group to the other. As such, the variation in experiences described within the outcome space may not necessarily reflect only variations in discernment of critical features, but actual differences in programme delivery. However, this limitation is likely to have more theoretical relevance than practical import. The practical value of identifying important features to be discerned or experienced in order to facilitate more powerful ways of experiencing the programme would still hold true.

6.5. Implications for Adventure Programming

These findings have important implications for adventure programming. Firstly, participants enter the programme with expectations, apprehensions, and a rich heritage of stories collected from previous participants. It is important that prior to departure, and during the first few days of the programme, these expectations are addressed at the individual level. Programme coordinators must facilitate the formation of characterisations of the programme that inspire participants to engage purposefully in the programme, ascribe responsibility for making meaning of the programme to themselves, and guiding them in establishing idiosyncratic goals. Secondly, programme activities should, as far as is possible, be sequenced to allow for
participants to experience and discern collaborative group dynamics, mentoring interactions with adult leaders, and gradual exposure to challenges to prevent participants becoming consumed with the physical aspects of the programme. Facilitators should be aware of a range of activities, appropriate at different stages in the group development processes, that allow for processing and extracting meaning from experiences, such as solo, debriefs, and individual journalling or reflection exercises. Finally, programme facilitators need to manage their involvement in the group processes very carefully. It is important that they monitor and assess the extent to which participants are experiencing and aware of critical features of the programme, facilitate group interactions and engage in personal interactions that make more powerful experiences possible, while at the same time allowing groups the autonomy and power to become self-directed learners. Achieving this balance requires that adult leaders are appropriately trained in hard and soft skills necessary for effective outdoor leadership (Priest & Gass, 2005), and at times a degree of visceral judgement, that allows for a synergy between adolescent needs and facilitator intentions (Priest, 1990).

6.6. Implications for Research

As far as the author is aware, this is the first study to use a phenomenographic approach to study the process and outcomes of adventure programming. Although a relatively unknown methodology outside the context of higher education, phenomenography has demonstrated utility in providing a methodology to study learning, and identify aspects of the phenomenon critical to improved educational
outcomes. This makes it particularly valuable from a pedagogical perspective for programme coordinators who wish to improve the effectiveness of their interventions. This study has demonstrated the value in understanding programme components and processes based on the meanings derived from programme experiences by the participants themselves. One of the greatest strengths of this approach to researching the programme, is that one is able to form a coherent collective understanding of the programme, while at the same time basing all of the data generation, and much of the analysis, on personally relevant and idiosyncratic perspectives of programme experience. It is advisable that in the future researchers in the fields of psychology and particularly adventure programming, consider making use phenomenography when they seek to understand the ways interventions can be experienced, and desire to identify the critical elements of the programme upon which efforts to improve effectiveness can be based. This study has demonstrated the utility of using the methodology of phenomenography to understand the different ways in which a school-based adventure programme was experienced, and analysing the critical aspects of the programme, as experienced and reflected on by the participants, that contribute to the variation in outcomes reported on.
References


Allan, J. F., McKenna, J., & Hind, K. (2012). Brain resilience: Shedding light into the


Colorado Outward Bound School.


adventure programming (pp. 451-461). Dubuque, IO: Kendall/Hunt Publishing.


Coming of age: The evolving field of Adventure Therapy (pp. 31-55). Boulder, CO: Association for Experiential Education.


ekspedisiegebaseerde (wildernis) AEL ten opsigte van persoonlike en groepeffektiwiteit: 'n rekreasiekundige perspektief (Unpublished doctoral dissertation). North-West University, Potchefstroom.


Harker, N., Kader, R., Myers, B., Fakier, N., Parry, C., Flisher, A.J., Peltzer, K.,


Gass (Ed.), *Adventure therapy: Therapeutic applications of adventure programming* (pp. 11-41). Dubuque, IO: Kendall/Hunt Publishing.


Priest, S. (1990). Everything you wanted to know about judgement, but were afraid to ask. *The Journal of Adventure Education and Outdoor Leadership, 7*(3), 5-12.


Rogers, C. (1959). A theory of therapy, personality, and interpersonal relationships as developed in the client-centered framework. In S. Koch (Ed.), *Psychology: A


* Name of the publisher purposefully removed to protect the anonymity of the organisation
Appendix 1:

Examples of interventions using adventure or wilderness in the Western Cape

Nature Calls
Mandy Young provides access to a number of “ecotherapy experiences” which emphasise a greater awareness of self through contact with wild dogs, dolphins, meercats, elephants, and other animals. She is especially interested in the healing properties of studying the formation of wild dog packs and elephant herds for post-divorce adjustment and other aspects of family therapy.

Sally Davis
Sally is a psychologist in private practice who uses the Helderberg Nature reserve as a context in which to do therapy with children. She makes use of metaphors with regard to animal behaviours to help children understand their behaviours and defence mechanisms.

Ecopsychology Africa
Jeffrey Rink is a clinical psychologist that runs ecotherapy trips to various nature reserves for groups of clients from a Jungian perspective.

Outward Bound South Africa
Outward bound have a facility near the Houw Hoek Valley in the Western Cape that provides developmental adventure programmes to private individuals, schools and other organisations.
### Appendix 2: Comparison between analysis steps taken by seven different phenomenographers

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Clarify the focus of the study</td>
<td>Formulate the phenomenon of interest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Familiarisation with the data</td>
<td>Reading the transcripts a number of times</td>
<td></td>
<td></td>
<td></td>
<td>Familiarisation</td>
<td>Read the transcripts as a whole, noting at similarities and differences</td>
<td></td>
</tr>
<tr>
<td>(3) Dealing with contextualisation</td>
<td>Decide whether utterances or whole transcripts will be used</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Data reduction or condensation</td>
<td>Highlight words and phrases that capture a specific theme from a subset of the data</td>
<td></td>
<td></td>
<td></td>
<td>Select significant statements that are (1) relevant to the research question, (2) convey a singular concept, and (3) convey a bold or vivid concept.</td>
<td>Re-read transcripts while beginning to hone in on questions aiding in separating the relevant from irrelevant within the text.</td>
<td>Select and highlight utterances of interest</td>
</tr>
<tr>
<td>(5) Pooling together data</td>
<td>Sort responses in</td>
<td></td>
<td></td>
<td></td>
<td>Themes are understood first from the contextualised meaning in individual transcripts, and then de-contextualised meaning in pools of quotes.</td>
<td>On the third reading start making notes on a separate paper, summarising the key issues and themes in each transcript in relation to the whole set of interviews</td>
<td></td>
</tr>
<tr>
<td>(6) Formulating</td>
<td>Tentative themes are</td>
<td>Sort responses in</td>
<td>Constitute an initial</td>
<td>Co-researchers</td>
<td>Comparing and</td>
<td>Iteratively work with</td>
<td>Quotations are</td>
</tr>
</tbody>
</table>

Stellenbosch University  http://scholar.sun.ac.za
<table>
<thead>
<tr>
<th>tentative categories of description</th>
<th>grouped into categories, transcripts are checked to ensure categories are complete and consistent with the data</th>
<th>terms of the focus and frame of reference by an iterative process</th>
<th>set of categories based on relevant sections of the transcripts</th>
<th>independently assign transcripts to draft categories by (1) trying to identify the conception evident in each transcript, and (2) clarifying the features of each conception by comparing and contrasting it with other draft categories.</th>
<th>contrasting significant statements for similarities and differences in order to group them into categories</th>
<th>the transcripts or just the notes, to come up with patterns of similarity and difference by placing them on the floor in a relational arrangement.</th>
<th>considered and organised in terms of the context from which they were taken, as context influences meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>(7) Refine the categories of meaning</td>
<td>Refine categories using all data by reading transcripts to refine and where</td>
<td>Assess the fit between individual responses and the description of the</td>
<td>Compare and discuss the sets of categories among independent researchers, resulting</td>
<td>Articulating -</td>
<td>Re-read transcripts in each category alternatively searching for</td>
<td>(6) Iteratively compare categories within themselves and between similar</td>
<td></td>
</tr>
<tr>
<td>Necessary redefine categories</td>
<td>Categories</td>
<td>In an agreed upon set of categories</td>
<td>Similarities and differences in meaning. Search for dimensions of variation that run across transcripts and holistic meaning conveyed by the transcripts.</td>
<td>And different categories; concurrently test definitions of categories against their content and write up formal descriptions of similarities and differences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------</td>
<td>-----------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(8) Define and label categories of description</td>
<td>Identify category's most characteristic features by constantly referring back to the transcripts. Iteratively read the transcripts shifting perspective based on better understandings of the emerging categories contrasted with a focus on the conceptions represented in the transcripts.</td>
<td>Labelling</td>
<td>Criteria describing each category are documented explicitly by synthesising the core meaning and using suitable quotations to justify the condensation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Validification of analysis process</td>
<td>Each co-researcher tries to categorise the transcripts using the categories of description after which they once again discuss their findings and make relevant adaptations to the categories of description.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Define dimensions of variation and structural relationships</th>
<th>Construct relationships among categories, identify similarities and differences between categories in order to discern relations by looking for the dominant aspects in each category.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consider the relations between categories</td>
<td>Discuss and refine structure of categories without reference to the data, focussing on the logical relationships between them. Test these formulations on the transcripts and reconstitute the categories again based on the data. Iterate until the final logical structure emerges.</td>
</tr>
<tr>
<td>Explore the 'what' and 'how' aspects, and the internal and external horizons of the conceptions.</td>
<td>Looking for dimensions and themes that would provide the structural relationships, and clarifying the meanings conveyed in categories are more separated in the early stages, but become increasingly integrated over time.</td>
</tr>
</tbody>
</table>
Appendix 3: Initial plot of categories of description
Appendix 4:

Interview schedule

2. Interview Protocol

Informants were encouraged to speak freely about the most salient programme elements and encouraged to give descriptions of concrete examples, which are more valued in phenomenography than superficial descriptions of how things should or are expected to be (Larsson & Holström, 2007). The interviewee's descriptions were directly probed with specific questions asking the participants for detailed descriptions of what happened during these experiences, and what meanings they hold for the participants. The venue for interviews was familiar to the participant, which assisted in ensuring they felt comfortable, able to talk freely without fear of being overheard, and there was not too much noise and distraction.

Questions that were asked include:

What is it like to go on this programme?

What has changed since you took part in this programme?

What are the things that have happened that made you aware of this change?

What are the main experiences that have contributed to this change?

So tell me what it is like to do [name of programme].

What does it mean to grow or develop through [name of programme]?
Appendix 5:

Symbols used in the transcripts

<   Participant is increasing their volume
>
_   Unbroken continuation in dialogue between speakers
…  Break in the transcript, some dialogue removed
[?? word ??]  Recording unclear, sounds like
[ expression ]  Notes on non-verbal communication